

PROSPECTS OF EXPORTING AMERICAN COAL

HEARING
BEFORE THE
SUBCOMMITTEE ON
NATURAL RESOURCES DEVELOPMENT AND
PRODUCTION
OF THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
NINETY-NINTH CONGRESS
SECOND SESSION
ON THE
PROSPECTS OF EXPORTING AMERICAN COAL

AUGUST 5, 1986



Printed for the use of the
Committee on Energy and Natural Resources

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1987

70-195

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

S311-31

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PROSPECTS FOR EXPORTING AMERICAN COAL

TUESDAY, AUGUST 5, 1986

U.S. SENATE,
SUBCOMMITTEE ON NATURAL RESOURCES
DEVELOPMENT AND PRODUCTION,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:40 a.m., in room SD-366, Dirksen Senate Office Building, Hon. John W. Warner, presiding.

Present: Senators Warner, Nickles, Hecht, and Rockefeller.

Also present: Robert L. Terrell, professional staff member; and Patricia J. Beneke, counsel for the minority.

OPENING STATEMENT OF HON. JOHN W. WARNER, A U.S. SENATOR FROM THE STATE OF VIRGINIA

Senator WARNER: I apologize for being late, but as often happens in the life of individual Senators and the Senate, as a whole, we have so little control over our schedule that it impinges on the lifestyle of others. I apologize to the witnesses and others in attendance this morning.

This particular hearing, which has been scheduled for a long time, now coincides this morning with the Senate floor debate on the armed services authorization bill. I am a member of that committee and a chairman of the Subcommittee on Strategic Systems, and today's debate focuses on SDI, for which I have the principal responsibility on the majority side on the committee as chairman of that subcommittee.

We will find time today to devote to this hearing. I apologize for any disruption that I may have caused this morning, and that will occur later on during the day.

I hope you can schedule a period from 12 to 1 o'clock today as sacrosanct. We will be here during that period when the Senate stands in recess. I shall be here, and will do my best this morning. Let us get underway.

Today the Subcommittee on Natural Resources Development and Production will hear testimony from a distinguished panel of witnesses regarding the prospects for exporting American coal.

I welcome all of you to the committee and thank you for taking time from your demanding schedules to share with the committee your views on this very important subject.

Increasing coal exports and improving the competitiveness of American coal in world markets have been and will continue to be

among the highest priorities in the Senate, and certainly of my subcommittee on the Energy Committee.

Expanding America's coal export market is vital to our economic good health because it means jobs for coal miners, jobs for railroad workers and jobs for those in many coal-related industries. Also, I think it contributes materially to our National security because the degree to which this Nation has its own sources of energy, is the degree to which we have a stronger National security.

Expanding America's coal export market is also important for the energy security of this country, as well as the security of our allies.

This subcommittee has heard testimony from many of our witnesses before on ways to expand coal exports. Unfortunately, we have not heeded their recommendations and the United States has fallen to fourth among coal exporting nations.

I would like to report that the Senate is making substantial progress on two specific recommendations.

First, an often repeated reason given for America's declining share of the coal export market is the lack of deepwater port facilities.

After many years of negotiation, the House and Senate are in conference on a water resources authorization bill. Both the House and the Senate bills provide for the deepening of our super ports.

I have every expectation that the Congress will enact this legislation.

Already, major ports are moving forward with the anticipated cost-sharing requirements with the Federal Government. There has been significant interest on the part of local ports, private industry, and State governments to do their part to restore America's competitiveness in world trade.

The second area of progress is the Clean Coal Technology Program to demonstrate improved technologies for burning coal in an environmentally acceptable manner.

I am convinced that these emerging technologies can be successfully demonstrated, and will greatly advance our national goals of utilizing our immense domestic energy resource.

The Department of Energy has selected nine projects to demonstrate a new generation of coal burning proposals. I believe that sharing these new technologies to burn coal with our coal-buying partners will further enhance America's exporting competitiveness.

These two initiatives will be of great benefit to the coal industry, but much more must be done to increase coal exports. I hope each witness will be candid and offer their recommendation.

While the international coal market is apparently experiencing a downturn, I am convinced it will be temporary. This should inspire us, Congress and the Administration, to work even harder to capture a larger share of the world energy market for American coal.

I welcome the participation in this hearing, as in all hearings related to coal, my distinguished colleague from West Virginia, Senator Rockefeller.

STATEMENT OF HON. JOHN D. ROCKEFELLER IV, A U.S. SENATOR
FROM THE STATE OF WEST VIRGINIA

Senator ROCKEFELLER. Thank you, Mr. Chairman. As I have told you at hearings of this sort before, I know of nobody in the U.S. Senate who fights more consistently or more constructively for coal than you do, and I am pleased to be with you this morning and to echo, in fact, many of your thoughts as I read them and listened to them in your statement.

Frankly, I am very pleased that you have called these hearings because the coal producers and the miners who depend on export coal trade are in fundamentally desperate straights. The good old days of 1981, which I remember, have now become the doldrums of 1986, and the economy of Appalachia, particularly southern West Virginia, has lost all momentum as a result.

My message today, Mr. Chairman, is very simple. We as a Congress, we as a Government, those of us who promote American coal, must do a great deal more to help pull these coal communities that I speak of out of the tailspin in which they now find themselves.

Mr. Chairman, the first quarter results in 1986 appear to be a harbinger of further bad news. A further 7-percent slippage, compared with a similar period of 1985, on top of a near 20-percent decline from the 1981 period that I mentioned, show the dimension of the problems that we face.

Some of the witnesses here today from the administration have it partly within their power to affect a change, and I know that they are trying their very best to do so. But they double, and then they must redouble, again, their efforts to save the \$5 billion per year positive contribution to the balance of payments that our coal exports bring to this country, as well as the thousands of coal mining jobs.

Both here and abroad, our Government must make coal a larger part of our total trade efforts. Mr. Chairman, coal must get the same level of attention as computer chips, and the Appalachian Basin, of which you and I are a part, must be promoted with the same vigor as Silicone Valley.

Mr. Chairman, when I visited Japan and Korea earlier this year, I found two countries in stark contrast. In Japan, our coal exporters are struggling to stay even. In Korea, on the other hand, the prospects for additional coal sales are substantial.

Our officials here and in Japan should understand that we expect nothing less than full adherence to the Reagan-Nakasone Accord on Energy, a matter which I discussed directly with the Prime Minister.

In the Korean market, the time is now to be the promoter of American coal. That economy is poised to expand at a very fast pace, and American coal should be a part of their equation—a greater part, even.

Mr. Chairman, the export coal industry in this country deserves nothing less than a 150-percent effort to help them regain the prominence that they once enjoyed.

I compliment you, as I frequently and accurately do, on holding these hearings and helping to bring out some of the issues related

to the struggle for coal export in the part of Appalachia that you and I come from.

I thank the chairman.

Senator WARNER. Thank you, Senator Rockefeller.

This morning, we are privileged to have a very distinguished panel here. Perhaps no three men have greater knowledge of this subject, and what we can do here in the legislative body to facilitate what the executive branch is now doing in trying to increase coal exports.

Mr. Secretary, will you lead off?

**STATEMENT OF CLARENCE J. BROWN, DEPUTY SECRETARY,
DEPARTMENT OF COMMERCE**

Mr. BROWN. Mr. Chairman, Mr. Rockefeller, thank you for asking me to appear before your subcommittee to discuss the coal export market and the activities being pursued by Commerce to assist the coal industry in increasing coal exports.

You know that I have a long-term interest in coal and I welcome the opportunity to explore, with your subcommittee, ways we might expand our efforts to help increase export markets and sales.

Last year, our coal exports were valued at \$4.46 billion and our imports were about \$73 million. Coal exports are a very important contributor to our Nation's trade balance and can be even more so in the future.

I will cover three areas this morning: the changing nature of international coal trade, the current export promotion activities of the Commerce Department's International Trade Administration, and the Federal Coal Export Commission.

The most significant change in the international coal market over the last 10 years has been the rapid growth of trade in steam coal. Metallurgical coal, met coal, historically the backbone of the international coal market, grew minimally and is expected to remain essentially stagnant the rest of this decade.

There are prospects for an even higher demand for steam coal should further delays in nuclear plant construction, or if another oil supply shortage occurs. Negative factors to growth, on the other hand, are long-term low oil prices, acid rain controls, and the fear of the consequences from the Greenhouse Effect.

The ability of U.S. exporters to compete is dependent on many domestic-related factors, as well as international market consideration. Domestic cost factors usually account for 75 to 85 percent of the overseas delivered price and are the major determinants in our ability to be price competitive in U.S. production.

They include the cost of complying with extensive environmental, health and safety regulations, standards and operating practices in mining, inland U.S. rail transportation costs, and channel depth restrictions at U.S. coal ports which have adverse effects on competitiveness of U.S. coal.

Our major competitors have rail systems and port terminal facilities which are designed to be highly efficient and result in lower overall costs than those for movements of U.S. coal. On a positive note, the coal industry has been investing in new and more produc-

tive mining equipment and labor management relations have never been better.

Some U.S. coal exporters have been able to lower their FOB mine prices to meet the price competition in selected markets. In general, the United States is one of the highest price met coal suppliers in the world. Steam coal exporters, except in a few markets where a premium is paid for high-quality coals, have been unable to lower minemouth prices sufficient to compete.

The number one challenge to U.S. exporters is to improve price competitiveness to compete in the stagnating met coal market and the growing steam coal market. There is also a need to monitor foreign coal procurement policies and practices, to identify those that are changing in ways disadvantageous to U.S. exporters, and those moving in a direction away from fair coal trade principles.

For instance, met coal purchases by overseas buyers in the past were generally through long-term contracts based on commercial cost, plus pricing considerations. More typical met coal purchases are now one-year supply contracts as coal prices are dropping, because of excess supply. Compounding the oversupply problem is government policy by some importing countries, which allocate market shares among coal exporting countries based on political considerations.

For steam coal, the market situation is different, but there are similarities to met coal. Since most major steam coal importing countries have state-owned or state-controlled electric utility systems, import coal policies are generally established by the central government. The recent action by Denmark and France to restrict South African coal imports, and that by Israel's attempt to prohibit imports of United States coal, are some recent examples of political decisions dictating the purchases of steam coal.

Commerce will continue to monitor world coal trade and take actions jointly with the Departments of State and Energy whenever we believe our industry's participation in international trade is threatened by actions of other governments that are contrary to fair trade principles.

Coal export promotion activities are the other subject that I wanted to cover. The guiding principles for the Department of Commerce coal export promotion activities are founded on the National Coal Export Policy, which Secretary Baldrige announced in July 1981. Our goal is the development of an effective working relationship with industry that establishes the United States as a leader in a fair and stable world coal trade.

The International Trade Administration at Commerce, ITA, in cooperation with other government agencies and the coal exporting industry has undertaken export promotion activities, both on a government-to-government basis and with private industry. A successful example is the recent Korean-United States coal seminar, held in Seoul in May.

The seminar Korean coal user with specific information about United States coal production, United States inland transportation of coal, and port facilities, sourcing and availability of coal from the United States, and the latest technical advances in the clean use of coal.

The feedback from the 200 Korean and 30 United States industry and Government officials attending the seminar was that it accomplished its purpose; many new contacts were established by United States exporters.

Another example of cooperation, is the comprehensive 200-page report on the U.S. coal industry, which was prepared for this seminar by ITA's Office of Energy, and Coal Exporters Association. Similar reports will be used in future joint coal export promotion projects.

One program still in the development stage is to find a way to tie coal technology and coal supply into an export package using long-term Eximbank financing and concurrent FCIA insurance to help sell U.S. coal by exploiting U.S. advance combustion technology.

Assistance to exporters is available from a wide variety of sources and services in Commerce, including ITA's Office of Energy, international trade country specialists, in the Office of International Economic Policy, and our foreign commercial service officers, in 120 locations overseas.

At the government-to-government level, the Department of Commerce promotes increased exports of coal through the many bilateral government meetings that address trade issues. One of the most prominent efforts of the Administration is the Bilateral Energy Trade Consultation with Japan. The United States-Japan working group was established in January 1983 to promote an increase in energy trade, particularly in coal, between our two countries.

Reports on these bilateral discussions and on the implementation of the November 1983 Reagan-Nakasone Joint Statement on Energy Cooperation, JPS, have been given to Congress and the coal industry. The joint statement calls for the exploration of opportunities for expanded bilateral trade in coal and commits both governments to urge their private sectors to develop long-term commercial contracts and projects to increase the use of United States coal by Japan's major users of metallurgical and steam coal.

We are deeply disappointed in the results so far from the energy agreement with Japan. Our met coal exports to Japan have declined each year, since 1983, and steam coal exports have shown no improvement. We are no less unhappy over these results than U.S. coal exporters are. Although we understand the exporters frustrations, a decision early this year to withdraw from the Joint Coal Standing Technical Committee, a private group set up to help implement the JPS, we continue to urge them to maintain a dialogue with the major coal users in Japan.

An opportunity to recover some of our lost market shares in Japan could come about if the Japanese Government decides to phase out the subsidies to its domestic coal mines. We are urging Japan to terminate coal production subsidies and expand its imports of United States coal.

Finally, Mr. Chairman, let me turn your attention to the Federal Coal Export Commission. Secretary Baldrige serves as Chairman of the Commission. I serve as Chairman in his absence.

The Commission provides a forum in which government and private sector representatives can discuss impediments to U.S. coal ex-

ports and develop policy recommendations which will help to expand the U.S. share of the international coal market.

Congress calls for the Commission to complete its work within 2 years, or by the fall of 1987. I am pleased to say that the Commission should complete its work before the end of 1986. The Commission consists of five committees. The first committee, the State of the Industry Committee, has completed and approved its draft report, which I have here, Mr. Chairman.

This comprehensive report will assist the other committees to produce their reports. The other four are Committees on Trade, Export Finance, Regulation and Employment, Productivity and Adjustment, and have held meetings and are working to meet the deadline. A copy of the State of the Industry report has been provided to your committee staff.

Working together, their final report is expected to provide a discussion of the problems the United States faces in exporting its coal, and a realistic set of solutions designed to increase our share of the international coal market, a matter for which we are all concerned.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Brown follows:]

STATEMENT

CLARENCE J. BROWN
DEPUTY SECRETARY
U.S. DEPARTMENT OF COMMERCE

Before the
Committee on Energy and Natural Resources
Subcommittee on Natural Resources Development and Production
United States Senate
August 5, 1986

Thank you Mr. Chairman for asking me to appear before your Subcommittee to discuss the coal export market and the activities being pursued by Commerce to assist the coal industry in increasing coal exports. You know that I have had a long-term interest in coal, and I welcome the opportunity to explore with your Subcommittee ways we might expand our efforts to help increase export markets and sales.

Last year our coal exports were valued at \$4.46 billion, and our imports were about \$73 million. Coal exports are a very important contributor to our nation's trade balance and can be even more so in the future.

I will cover three areas. Each is pertinent to the purpose of this hearing, and each relates to the prospects for U.S. coal exporters in world coal trade.

First I will comment on the changing nature of international coal trade and the implications for U.S. exporters and exports. Second, I will outline some of the current export promotion activities of the International Trade Administration designed to enhance the competitive strengths of our coal exporting industry, and counterbalance both domestic and international constraints to U.S. coal exports. The third and final area is the status of the Federal Coal Export Commission of which I am the Chairman Pro Tem.

Changing Nature of International Coal Trade

The most significant change in the international coal market over the last 10 years has been the rapid growth of trade in steam coal. Metallurgical coal trade, historically the backbone of the international coal market, grew minimally and is expected to remain essentially stagnant the rest of this decade.

From 1975 to 1985 the metallurgical (met for short) coal market grew at an annualized rate of 2.7 percent. In contrast steam coal demand, although starting from less than one fourth the volume of met coal (about 140 million short tons met versus 37 of

steam in 1975), experienced a growth rate of nearly 14 percent. In 1985 almost as much steam coal was traded in the international market as met coal. In the next few years steam coal trade will surpass met coal trade.

The Energy Information Administration's latest projections show that world seaborne steam coal trade will grow from 154 to 287 million tons by 1995, while met coal will only increase from 158 to 168 million tons.¹

There are prospects for an even higher demand for steam coal should further delays occur in nuclear plant construction or if another oil supply shortage occurs. Negative factors to growth on the other hand are long-term low oil prices, acid rain controls and fear of the consequences from the "greenhouse effect".

I mention these potential market aberrations, not because U.S. coal exporters would experience disproportionate impacts should any of these possibilities occur, but to emphasize that unforeseen events may accelerate or slow the anticipated growth in steam coal use. World emphasis on using coal in clean burning boilers can do much to alleviate the environmental fears.

The current world met and steam coal markets are extremely competitive. A large world excess supply of both types of coal has lowered delivered prices ranging from 10 to 25 percent over the past few years.

The ability of U.S. exporters to compete is dependent on many domestic cost-related factors as well as international market considerations. Domestic cost factors usually account for 75 to 85 percent of the overseas delivered price and are the major determinants in our ability to be price competitive. International market factors, especially coal procurement policies of importing countries, can circumscribe the extent to which U.S. coal can penetrate their markets.

The domestic factors which impact our price competitiveness are the costs of complying with extensive environmental, health and safety regulations, standards and operating practices in mining. Many mine operators believe that some of these regulations exceed reasonable requirements. Many go far beyond those imposed on our major economic competitors. To the extent that unnecessary or duplicative requirements exist, they add costs which reduce the ability of U.S. exporters to compete.

¹ Outlook for U.S. Coal Imports, Energy Information Administration, DOE/EIA-0483, March 1986.

Inland U.S. rail transportation costs and channel depth restrictions at U.S. coal ports have adverse effects on competitiveness of U.S. coal. Our major competitors have rail systems and port terminal facilities which are designed to be highly efficient and result in lower overall costs than those for movements of U.S. coal. While it appears that the U.S. port problems are being given some attention in the conference on H.R. 6 and S. 1567, no such statement can be made about lowering inland transportation costs.

There are a host of other problems that affect the mine-mouth cost of coal, such as state and federal tax laws. These are costs to the operator and need to be included in any assessment of our basic ability to compete.

On a positive note the coal industry has been investing in new and more productive mining equipment. Labor-management relations have never been better. On a national basis, average underground mine productivity has increased 60 percent since 1978. Surface mining productivity has improved 34 percent.

While many of the coal exporting chain problems continue to constrain exports, some U.S. coal exporters have been able to lower their f.o.b. mine prices to meet the price competition in selected markets. In general, the U.S. is one of the highest priced met coal suppliers. Steam coal exporters, except in a few markets where a premium is paid for high quality coals, have been unable to lower mine-mouth prices sufficient to compete.

The trends in international coal trade and their implications for U.S. coal exporters are quite clear. The number one challenge to U.S. exporters is to improve price competitiveness to compete in the stagnating met coal markets and the growing steam coal markets. Two basic requirements are to reduce costs in each of the components that make up the delivered price and to develop specific marketing strategies that capitalize on the broad range of high quality coals available from the United States.

Industry's marketing strategies and the U.S. government's support of these efforts need to accommodate the various coal purchasing policies and practices of importing countries. There is a need to monitor foreign coal procurement policies and practices to identify those that are changing in ways disadvantageous to U.S. exporters, and those moving in a direction away from "fair coal trade" principles. Let me illustrate in broad form how coal procurement policies have changed and give some of the resulting concerns that they are generating for industry and government.

Met coal purchases by overseas buyers in the past -- even those by State controlled enterprises -- were generally through long-

term contracts based on commercial, cost-plus pricing considerations. Diversification policies usually reflected commercial security of supply considerations.

The more typical met coal purchases are now one-year supply contracts as coal prices are dropping because of excess supply. Importers want the flexibility to buy at the lowest prices. Market prices are below full cost recovery for most exporting countries, because of the fierce competition among suppliers to maintain market share. Compounding the over-supply problem is government policy by some importing countries which allocate market shares among coal exporting countries based on political considerations, including the coal importing country's access to markets in the exporting country.

Under these conditions and changing procurement practices in the world's met coal markets, the generally higher cost U.S. met coal exporters are disadvantaged. Until the past several years, the U.S. producers were generally competitive against other exporting countries. With the development of new and large scale mines and more efficient transportation systems dedicated to the export market in Australia, Canada, Peoples Republic of China, and USSR, and the appreciation of the dollar, U.S. exporters lost their competitive advantage.

Today, while still being generally competitive on mine mouth costs, the U.S. met coal exporters are not competitive on delivered prices because of the longer distances and higher inland and ocean transportation costs, particularly to Pacific Rim markets.

For steam coal, the market situation is different, but there are similarities to met coal. International trade in steam coal in the 1970's was largely among contiguous nations and coal purchases were governed by reciprocal trade agreements. Following the oil crises in the 1970's coal demand grew for power generation. As seaborne coal trade increased, the procurement practices of electric utilities became the dominant factor in steam coal trade decisions.

Since most major steam coal importing countries have state-owned or -controlled electric utility systems, import coal policies are generally established by the central government. Policies vary among countries as to the relative importance given to commercial factors in making buying decisions. There are many political factors which seem to determine the allocation of market shares. The recent actions by Denmark and France to restrict South African coal imports, and that by Israel's attempt to prohibit imports of U.S. coal, are some recent examples of political decisions dictating the purchases of steam coal.

Although I have mentioned only a few of the more significant changes in world coal trade, it is clear that the ability of the U.S. coal industry to compete has been affected. These changes in coal trade, especially those distorting fair trade, illustrate why the U.S. government and the Department of Commerce must take an active interest in international coal trade. We are always concerned about actions which would indicate that U.S. coal exporters are being squeezed out of the met and steam coal international markets for reasons other than price competitiveness.

Commerce will continue to monitor world coal trade and take actions jointly with the Departments of State and Energy whenever we believe our industry's participation in international trade is threatened by actions of other governments that are contrary to fair trade principles.

Coal Export Promotion Activities

The guiding principles for the Department of Commerce coal export promotion activities are founded on the National Coal Export Policy which Secretary Baldrige announced in July 1981. We are vigorously implementing this policy, which has three main principles:

- - to identify domestic and foreign impediments to U.S. coal exports and to promote domestic policies and government to government activities to minimize these barriers;
- - to develop coal export promotion programs that market the advantages of U.S. coal in overseas markets;
- - to facilitate and encourage private sector and foreign equity investments in our coal export chain infrastructure.

Our goal is the development of an effective working relationship with industry that establishes the U.S. as a leader in a fair and stable world trade in coal.

International competition has substantially increased in world coal trade in the past decade as several new competitors emerged following the oil shortages of the 1970's. The U.S. has lost market share to the new competitors for various reasons. However, we don't believe that the United States coal industry has lost its ability or resolve to compete in international coal trade.

The International Trade Administration of Commerce (ITA) in cooperation with other government agencies and the coal exporting industry, has undertaken export promotion activities both on a government - to - government basis and with private industry. A few examples should dispel any doubts about the Administration's commitment to help the coal industry compete in the export market, and more importantly, about the coal industry's interest, ability and resolve to compete.

In general most of ITA's specific export promotion projects are aimed at informing coal importing countries of the capabilities of the U.S. exporting industry and these projects are tailored to the importing country's particular interests and needs.

A successful example is the recent Korean-U.S. Coal Seminar held in Seoul in May. This seminar was jointly organized by the Korea Institute of Energy and Resources, the Coal Exporters Association of the United States, the Office of Energy in Commerce, and the United States Embassy in Seoul. The Coal Exporters Association hosted the seminar and coordinated the input from other U.S. coal industry associations.

The seminar provided the Korean coal user with specific information about the U.S. coal production, U.S. inland transportation and port facilities, sourcing and availability of coal from the U.S. and the latest technical advances in the clean use of coal. Special emphasis was placed on the use of various kinds of coal in industrial boilers because the Korean government recently initiated a program to encourage industries to convert from oil to coal.

The feedback from the 200 Korean and 30 U.S. industry and government officials attending the seminar was that it accomplished its purpose. Many new contacts were established by U.S. exporters. The Korean Institute of Energy suggested that another seminar be held in the future to expand on the material covered at the first seminar.

The Subcommittee has received a copy of the comprehensive 200 page report on the U.S. coal industry which was prepared for this seminar by ITA's Office of Energy and the Coal Exporters Association. Similar reports will be used in future joint coal export promotion projects which are now under consideration with the Coal Exporters Association and other associations.

Another type of export promotion involves working with individual companies or industry associations to develop specific technical and financial programs that use the resources available in other government agencies. Besides the Department of Commerce, other agencies involved in related coal export promotion activities are the State Department's Agency for International Development (AID), State's Trade Development Program (TDP), and its Economic

Affairs foreign country offices, and various offices in the Department of Energy. We also work with federal financial institutions such as the Export Import Bank (Eximbank) and Overseas Private Investment Corporation (OPIC). Other federal agencies are asked to cooperate and help as needed.

The activities in this area are varied and range from giving general advice to organizing a long-term plan to establish special facilities to aid coal exports. An example of the latter is a program still in the development stage to find a way to tie coal technology and coal supply in an export package using long-term Eximbank financing for the coal use equipment and concurrent FCIA insurance for coal supply contract. This program is designed to help sell U.S. steam coal by exploiting U.S. advanced combustion technology. This concept would also be applicable to metallurgical coal and advanced coke-making technologies.

Assistance to exporters is available from a wide variety of sources and services in Commerce. ITA's office of Energy has trade specialists to advise exporters on domestic and foreign policies that affect their markets and competitiveness, and to provide basic information on potential market opportunities.

International trade country specialists are available to advise U.S. coal exporters on economic and political conditions and constraints to doing business in respective countries. Our Foreign Commercial Service Officers in 120 locations overseas can provide on site help and advise on doing business in the foreign country. These and other services available from Commerce can be accessed directly by coal exporters or they can be provided through the coordinating activities of the Office of Energy in Commerce.

At the government to government level, the Department of Commerce promotes increased exports of coal through the many bilateral government meetings that address trade issues. One of the most prominent efforts of the Administration is the bilateral energy trade consultation with Japan.

The U.S.-Japan Energy Working Group was established in January 1983 to promote an increase in energy trade, particularly in coal, between our two countries. Reports on these bilateral discussions and on the implementation of the November 1983 Reagan/Nakasone Joint Statement on Energy Cooperation (JPS) have been given to Congress and the coal industry. The Joint Statement calls for the exploration of opportunities for expanded bilateral trade in coal, and commits both governments to urge their private sectors to develop long-term commercial contracts and projects to increase the use of U.S. coal by Japan's major users of metallurgical and steam coal.

We are deeply disappointed in the results so far from the energy

agreement with Japan. Our met coal exports to Japan have declined each year since 1983 and steam coal exports have shown no improvement.

We are no less unhappy over these results than U.S. coal exporters. Although we understand the exporters' frustration and decision early this year to withdraw from the joint Coal Standing Technical Committee, a private group set up to help implement the JPS, we continue to urge them to maintain a dialogue with the major coal users in Japan. An opportunity to recover some of our lost market share in Japan could come about if the Japanese government decides to phase-out the subsidies to its domestic coal mines. We are urging Japan to terminate coal production subsidies and expand its imports of U.S. coal.

At the last meeting of the U.S.-Japan Energy Working Group in Tokyo in March, Under Secretary for International Trade Bruce Smart made it very clear to the Japanese that it would be in their best interest to reverse the decline in their imports of U.S. coal. We hope that Japan will take that message to heart, and that they will soon take steps to halt the decline in U.S. met coal imports and commit to a substantial amount of steam coal beginning in the late 1980's.

Federal Coal Export Commission

Finally, Mr. Chairman, let me turn your attention to the Federal Coal Export Commission which Congressmen Nick Rahall and Hal Rogers were instrumental in creating. Secretary Baldrige serves as chairman of the Commission. I serve as chairman in his absence.

The Commission provides a forum in which government and private sector representatives can discuss impediments to U.S. coal exports and develop policy recommendations which will help to expand the U.S. share of the international coal market.

The Commission has thirty members; one-third representing the Federal government and two-thirds representing the private sector. The government is represented by Secretary Baldrige, the International Trade Administration of the Commerce Department, the Departments of Energy, Transportation, State, Interior, and Labor, the Office of the U.S. Trade Representative, Export-Import Bank, and the National Coal Council. The private sector seats are reserved for producers of export coal, coal labor, coal transporters and financial institutions involved with coal exports.

Congress called for the Commission to complete its work within

two years, or by Fall 1987. I'm pleased to say the Commission should complete its work before the end of 1986.

The Commission consists of five (5) committees. The first committee, the State of the Industry Committee, has completed and approved its draft report. This comprehensive report will assist the other Committees to produce their reports. The other four (4) committees on Trade, Export Finance, Regulation, and Employment, Productivity and Adjustment have held meetings and are working to meet the deadline. A copy of the State of the Industry report has been provided to your Committee staff.

Naturally, the final Commission report will present a more detailed analysis of the problems facing the coal industry than the one I've presented today. We have very knowledgeable, qualified people serving on the Commission. Working together, their final report is expected to provide a discussion of the problems the U.S. faces in exporting its coal and a realistic set of solutions designed to increase our share of the international coal market.

Senator WARNER. Mr. Brown, I want to ask one question here before we proceed to the other witnesses. We awakened this morning to an announcement of OPEC on curtailment of some of their production. This brings to mind really the substantial drop in oil prices and the impact that it has had on the coal export situation.

Do you have any indication that some of our traditional markets are now considering a shift from coal to oil, in view of the lower fuel costs?

Mr. BROWN. Some markets, in fact, have done that, Mr. Chairman. Including also shifts from coal to natural gas in some instances. It has occurred particularly in Europe.

Senator WARNER. Our next witness is Mr. William Martin, Deputy Secretary, U.S. Department of Energy.

**STATEMENT OF WILLIAM F. MARTIN, DEPUTY SECRETARY,
DEPARTMENT OF ENERGY**

Mr. MARTIN. Thank you, Mr. Chairman, Senator Rockefeller. It is a pleasure to be here. I started my career at the MIT Energy Laboratory as an analyst on coal and coal export markets under Carol Wilson. So a dozen years later, it is nice to be here to see where we are in the light of present circumstances.

Since that time, OECD countries have diversified their resources, adding more coal and nuclear power and gas, but I would like to call your attention to a visual which is in my formal testimony, which might help answer part of Senator Warner's concern about what I call, "The Return of OPEC," starring the Persian Gulf. It is a visual which looks like this.

It looks at market share of OPEC between 1960, with projections out to the year 2000. What it shows is that at the moment OPEC's share of the world oil market is only about 40 percent, compared with a little bit over 60 percent in the mid-1970's when even a small disruption with the Iranian revolution provoked a threefold price increase in 5 months.

As you can see, our estimates show that lower oil prices will probably result in a return to oil, and again, a return to reliance on OPEC and, in particular, a return to reliance on the Persian Gulf, which could reach as much as 50 percent of oil supplies by the mid-1990's. We are concerned about this outlook and we believe that coal has a major role to play in avoiding that undue reliance.

It would be a shame if we went back and made the same mistakes of the 1970's in the 1990's, and put ourselves at the mercy of some producers with major reserves.

Coal in that case is one of the key answers. Our analysis shows that coal use will increase over the medium term, both in the United States, as well as with our key allies. We estimate that coal exports will increase from about 80 million tons today, to maybe up to 120 million tons by the mid-1990's.

I emphasize our forecasts have been traditionally wrong, but clearly there is a critical role for coal to play here in diversifying away from oil.

The U.S. coal exporters have built a reputation as reliable suppliers. They have met an ever increasing share of the world market, and they have done so at times of crisis in the market. But as

prices have fallen, we have had to compete more vigorously, and indeed, it is important to note that the U.S. exporters have been competitive by lowering their prices to meet the world market conditions, which at the moment, has an oversupply of coal of about 40 million tons.

The market will remain a tough one. Keeping our share of the world market and our ability to meet the world coal needs will require that we have a very efficient coal export chain from the minemouth to the ultimate consumer.

The potential markets, we view, first in Asia; Korea and Taiwan are growing fast, and with that, means greater steel production and electricity needs. We see real opportunities, as Senator Rockefeller has noted, particularly in Korea.

In Japan, we have had relatively stable steel production which, of course, has limited our opportunities for short-term growth in the metallurgical coal market, but we see increased potential in steam coal for Japan.

Likewise, the metallurgical coal market in Europe has flattened, but once again, we see an increase in steam coal potential, particularly in Mediterranean countries, and if we can hammer away at the United Kingdom on their high-cost subsidies to local coal producers, we see a market there.

At DOE, we are interested in working in partnership with Commerce and State in a number of areas. First and foremost, it is our responsibility to ring the bell and say that we don't want to become overreliant on oil again, and there is a critical role for coal to play.

Here we have the national security argument, Senator Warner, that you have emphasized.

Secondly, we want to move coal up in the queue of trade issues. I once did an analysis of how much beef and citrus were equal to a million tons of coal, and it is a lot of beef and citrus. Clearly, coal with \$4 billion of trade presently is an important contributor to cutting the trade deficit. It is one of those commodities that we see as a means to reduce the trade deficit over the longer term.

I have also mentioned in trade, we have a responsibility to reduce the impediments to the marketing of U.S. coal, particularly, in the United Kingdom and Germany. And, I, like Deputy Secretary Brown and Senator Rockefeller, agree that we must push forward vigorously in implementation of the Reagan-Nakasone Agreement.

We can also emphasize the importance of clean coal technology. This is critical, not only to burning coal in the United States, but to our key allies, particularly Japan, who puts a high premium on the clean use of coal.

Here, the DOE effort, we hope, will have important spin-offs internationally, and more than one European has told me that if we can burn that coal cleanly, we will import a lot more.

I think this is an important initiative to keep at the forefront.

We also want to emphasize the importance of coal in the International Energy Agency Arena. Here, we have the activities of the Coal Industry Advisory Board, which are an important element of that activity. Last month I met with members of the Coal Industry Advisory Board in St. Louis to see what was on their mind to see how the government could support this important effort.

Lastly, I want to assure you that while I have only been in office 6 weeks now, I plan to give coal an important role in my personal activities at DOE. I have an open door to industry, an open door to the Congress and I look forward to coming up here to work with you, Senator, on this, because I just happen to think from a viewpoint of national security, coal is critical for the United States and our allies.

From the viewpoint of trade, it is a critical element to cut the trade deficit and emphasize the importance of free and fair trade, and it is a wonderful opportunity as far as employment is concerned.

I recall doing an analysis of what expanded coal trade would mean with Japan, and I recall that Commerce and DOE estimates said that we could have 100,000 jobs perhaps dependent on that trade in the future. That is terribly important.

With 26 States that have coal, it is one way that our allies can buy a lot of good will up here in the Congress and elsewhere as you debate important trade issues. If they buy coal, they buy into a lot of goodwill. We attach considerable importance to this and welcome the opportunity to testify.

[The prepared statement of Mr. Martin follows:]

STATEMENT

OF

WILLIAM F. MARTIN

DEPUTY SECRETARY

DEPARTMENT OF ENERGY

BEFORE THE

SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT AND PRODUCTION

COMMITTEE ON ENERGY AND NATURAL RESOURCES

U.S. SENATE

August 5, 1986

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EXECUTIVE SUMMARY

Over the past decade, OECD countries have diversified their energy supplies, relying more heavily on coal, gas and nuclear energy, and decreasing their dependence on oil. While lower oil prices pose clear economic advantages, they are expected to lead to higher dependence on oil. OPEC's share of the world oil market could increase from about 40 percent today to as high as 50 to 60 percent by the mid 1990s. Most of OPEC's oil production will be concentrated in the Persian Gulf.

Against this backdrop, OECD coal consumption is likely to grow -- perhaps significantly. Greater economic growth may stimulate coal consumption while lower oil prices may tend to depress coal demand. The degree to which nuclear power may be affected by the Chernobyl accident also may be a factor.

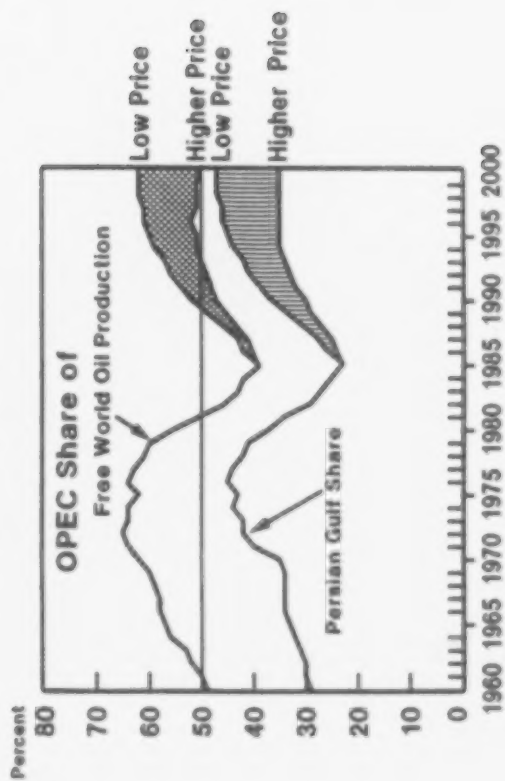
Within this environment, we would expect both US domestic coal consumption and exports to increase. Exports are estimated to grow from 91 million tons today to possibly 100-120 million tons by the late 1990s. If coal is to live up to its full potential, however, it is important that we continue to improve our ability to burn it more cleanly.

U.S. coal exporters are reliable suppliers, meeting the ever increasing demands of the world market and routinely compensating for shortages created by disruptions in coal markets. As prices have fallen, U.S. exporters have strived to maintain their relative competitiveness by lowering their prices to meet the competition. But with falling oil prices, the market is becoming even tighter and the competitiveness of U.S. coal becomes even more critical. Because U.S. coal prices are marginally higher, maintaining our share of the world market and our ability to meet the world's coal needs will require that the U.S. have a very efficient coal export chain from minesmouth to consumer. We are also working with our international partners to remove barriers to U.S. coal use.

The potential markets for U.S. coal continue to change. In Asia, growing steel production and electricity needs are increasing coal demand in the newly industrializing countries of Korea and Taiwan, but relatively stable steel production combined with heavy reliance on oil, gas and nuclear energy are limiting opportunities for short-term growth in Japan. Similarly, in Europe, metallurgical coal demand is expected to be relatively stagnant. Steam coal imports are expected to increase, especially in Mediterranean countries. Imports to Germany and the United Kingdom could also be increased if subsidies to high cost domestic production were reduced.

Expanded use of U.S. coal can benefit the Nation and the world. Higher employment in the coal industry and better utilization of our port facilities are direct benefits. In addition, expanded reliance on competitive U.S. coal is a critical form of insurance against the economic and security risks of greater world dependence on Persian Gulf oil. Key to a reasonable coal policy is letting market forces work by eliminating government barriers, not by increasing government subsidies.

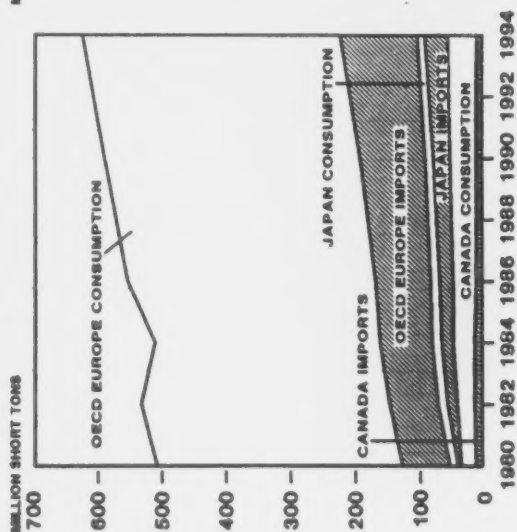
RELIANCE ON INSECURE OIL SUPPLIES



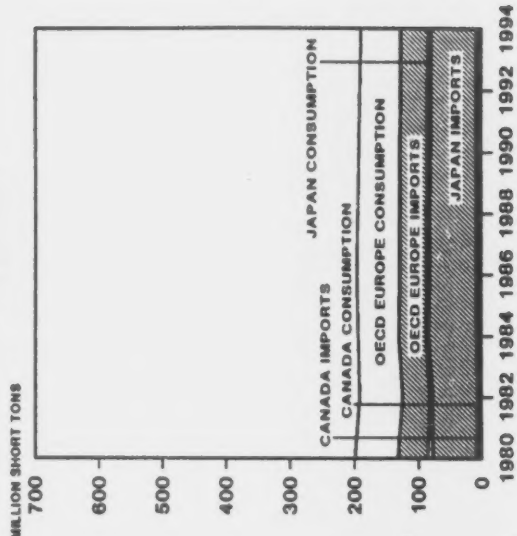
FURTHER DIVERSIFICATION AWAY FROM OIL COULD BE INHIBITED BY LOW OIL PRICES

- o Significant progress has been made in the last decade in diversifying world energy resources. OECD countries have reduced their dependence on oil and increased their use of natural gas, coal and nuclear energy. There have also been significant gains in energy efficiency, particularly in the United States.
- o Energy markets are currently in a state of transition as a result of the collapse in oil prices. We are revising our projections to take account of the impact of lower oil prices. Experience, of course, has taught us that all assessments are subject to change. Our preliminary assessments are:
 - o o Overall OECD energy demand is expected to grow significantly between now and the end of the century. Lower energy prices are stimulating both economic growth and consumption.
 - o o Oil consumption is already showing signs of growth and may experience the greatest rate of increase among all fuels. At the same time, OECD indigenous oil production, particularly in the U.S., is expected to decline. As a result, we and our international partners will become increasingly dependent on the Persian Gulf. OPEC's market share is likely to return to historic peak levels in the next decade.
 - o o Gas supplies from new indigenous fields will be needed in the OECD region to supplement declining production from older fields and to meet a projected increase in demand. OECD gas demand is expected to grow at a rate slightly lower than that for total energy until 2010. The recent signing of the Norwegian Troll/Sleipner contract is a significant step forward.
 - o o Nuclear. OECD nuclear energy generation was equivalent to 3.0 million barrels per day of oil consumption in 1984 and was projected to grow to 8.3 million barrels per day of oil equivalent (MMBOE) by 2000, an average annual growth rate of 3.5 percent. In light of the Chernobyl accident, the growth in nuclear energy generation is expected to moderate somewhat, perhaps to the level of 7.5-8.0 MMBOE by the year 2000, but the effects will probably not be as large over the next decade, because plants that will be coming on line during that time are typically already under construction.
 - o o Coal has great potential as an increasingly important element in world energy supplies. However, transportation difficulties, waste disposal problems, and air pollution must be overcome if coal is to realize its full potential.

WORLD STEAM COAL CONSUMPTION AND IMPORTS

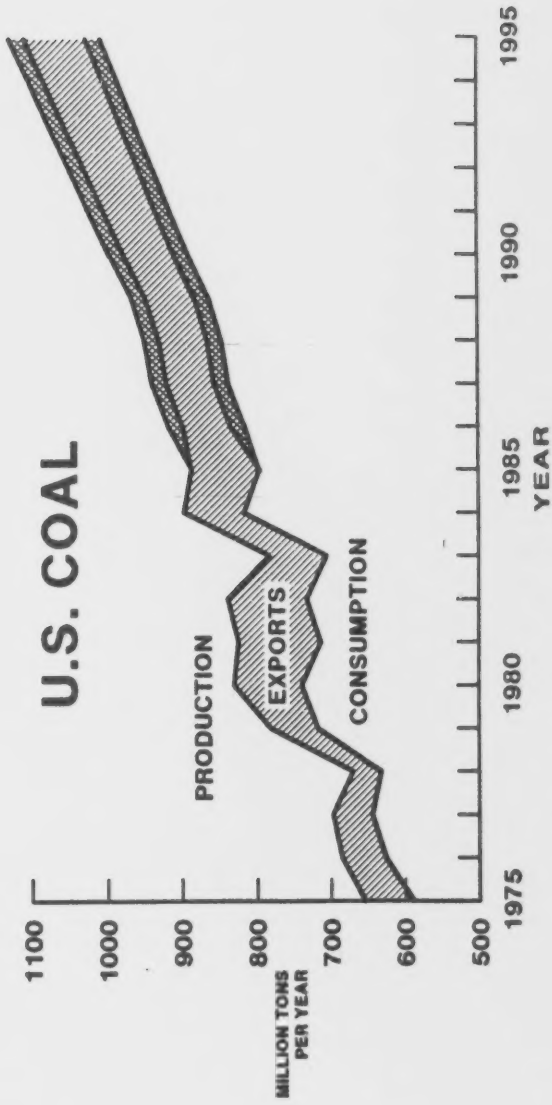


WORLD METALLURGICAL COAL CONSUMPTION AND IMPORTS



WORLD COAL CONSUMPTION WILL CONTINUE TO EXPAND

- o Despite lower world oil prices, world coal consumption is expected to continue to rise in the long term. Most of the growth is expected to be in steam coal demand, primarily as a result of increasing electricity requirements.
- o In contrast, metallurgical coal demand is not expected to grow rapidly, in part because of slow growth in steel demand and product substitution. The other major change in steel production is technological -- steel producers are shifting to technologies that have greater fuel flexibility or that do not use coking coals at all.
- o The principal Asian coal importers are Japan, Korea, and Taiwan. Together they account for about half of the expected growth in steam coal trade and almost all of the growth in metallurgical coal demand.
 - o o Japan is the largest user of coal in this region, with 74.2 million short tons (mst) of metallurgical coal imports and 20.3 mst steam coal imports in 1984. Steam coal imports are moderate and will increase as the Japanese diversify their energy supplies and bring more coal fired capacity on line.
 - o o Taiwan and Korea are emerging economies with rapidly expanding energy needs. As a result, both are expected to increase steam coal imports over the next decade. Korea is likely to increase its metallurgical coal imports as well.
- o In Europe, steam coal imports are expected to grow 79 percent over the next decade while metallurgical coal demand is expected to be stagnant. Many European countries have increased taxes on oil products, thus maintaining the incentive to switch from oil to other energy sources, especially in electricity generation.
 - o o The United Kingdom and Germany while being large coal users meet most of their coal demand through domestic production, which is heavily subsidized. Subsidized production is a barrier to coal imports within these and other countries.
 - o o Italy, which has been largely dependent on oil to generate electricity and to fuel industrial facilities, has embarked on a large program to convert its oil fired capacity to coal and to build new coal-fired powerplants. Therefore, its coal imports are expected to double in the next 10 years.
 - o o France, as the result of its large commitment to nuclear fueled electricity capacity, is expecting to retire several older coal fired powerplants over the next several years. These retirements, combined with flat demand for metallurgical coal, create little potential for increasing coal exports. France also took the step recently of closing some subsidized mines.



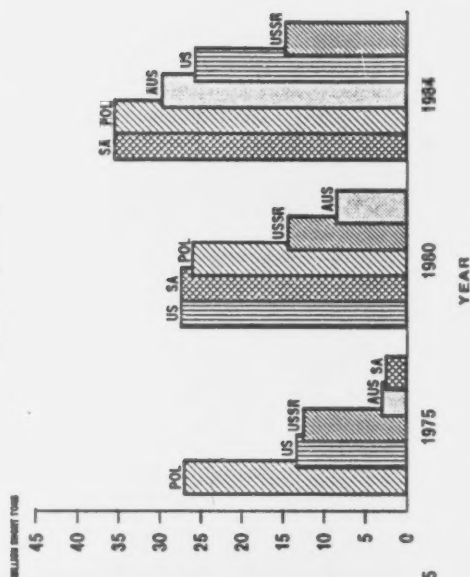
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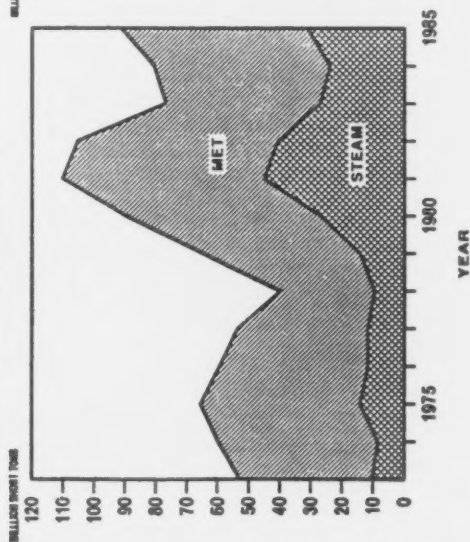
U.S. COAL CONSUMPTION WILL ALSO CONTINUE TO EXPAND

- o U.S. coal consumption is also expected to continue its long term growth trend, possibly increasing about 25 percent by 1995. This growth is primarily the result of increasing electricity demand. Nevertheless, the same factors that affect world coal use play a role in the U.S. The effects of lower oil prices on U.S. coal demand are uncertain, as illustrated by the projected range of U.S. coal consumption. The higher case assumes increased economic growth and relatively low rates of fuel substitution, whereas in the lower case, economic growth is relatively low and fuel substitution (i.e., oil for coal) is relatively high.
- o The greatest uncertainty about the future of overall U.S. coal production is in coal exports rather than domestic consumption. Within the U.S., coal demand is not as vulnerable to oil substitution as it is elsewhere in the world, largely because coal in the domestic market costs significantly less than coal traded in the world market.
- o Estimates of U.S. coal exports in 1995 range from 80 to 120 million tons per year, compared to 91 million tons last year. This forecast is driven by uncertainties about (1) the rate of growth in world coal demand and (2) the reliability of supply and costs of other coal exporting countries.
- o The U.S. clearly has the ability to supply the world with more coal. We have competitive coals and excess production capacity. Our inland transportation system is ready to handle surges in demand and coal terminal port capacity has been expanded to 200 million tons. Thus, the coal supply infrastructure will not have the problems that occurred in 1981 when U.S. exports surged to compensate for losses from Poland and Australia.
- o Increasing coal exports will have several benefits. It will provide valuable jobs in the Nation's mines and related service industries--allowing the United States to maintain employment. Similarly, modernized U.S. port capacity will be utilized and maintained. It will also help reduce our trade deficit. At the current time, coal exports account for about \$4.47 billion dollars in trade. And, in an era marked by wildly fluctuating world oil prices, America's coal resources provide a stable, secure source of energy which, if utilized, will provide long term economic and national security benefits to free world energy consumers.

TOP FIVE STEAM COAL EXPORTERS
BY RANK, 1975-1980-1984



U.S. COAL EXPORTS, 1973-85
STEAM + METALLURGICAL COAL



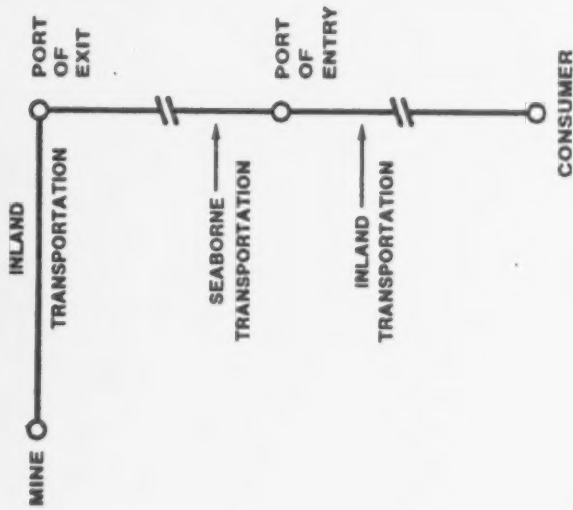
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A SOLID RECORD FOR U.S. COAL EXPORTS BUT THE COMPETITION IS KEEN

- o Over the years, the U.S. has played a major role in a rapidly changing world coal export market. Sixty-one countries all turned to the U.S. to fulfill part of their coal requirements in 1985. Quality, productivity and pricing, reliability and responsiveness are key strengths of U.S. coal trade.
- o o The U.S. has a vast reserve base which can supply a wide range of coal qualities. U.S. metallurgical coals have traditionally been strong because of their special coking characteristics and many U.S. steam coals are also high quality.
- o o U.S. producers have lowered prices by increasing productivity and lowering costs. Between 1980 and 1984, world steam coal prices fell 12 percent and metallurgical coal prices fell 6 percent. U.S. exporters lowered prices to meet the competition.
- o o Because our production base and labor force are large and stable, the world has come to realize that the U.S. industry will fulfill its commitments.
- o o Furthermore, the U.S. has the capacity to meet commitments that others cannot fulfill. Because of this responsiveness, U.S. coal exports fluctuate as disruptions occur in other markets.
- o Despite these strengths, the U.S. continues to lose market share to its major competitors. The U.S. share of the world coal market (metallurgical and steam) declined from 32 percent to 25 percent between 1980 and 1984. The market in which this has occurred has been rapidly changing, as illustrated by the reordering of the top five steam coal exporters over the past nine years. South Africa has entered the market and risen to share first with Poland, and Australia has also taken a major role. The U.S. has slipped from second to fourth.
- o These changes are driven by estimated overcapacity of 40 million tons in the world coal market and another 100 million tons in the U.S. In response to the quadrupling of oil prices in the 1970s, countries expanded their coal exporting capabilities and others entered the export market. Expectations about world coal demand, however, have not become reality. The result has been steeply declining prices, with some sales occurring below cash costs.
- o In this difficult market, the U.S. must cope with several marketing drawbacks. Among these are the higher sulfur content of many low-priced East Coast coals, relatively long inland distances from mines to ports and growing markets, and a multitude of coal supplier and transportation options.

COAL EXPORT SUPPLY CHAIN



REPRESENTATIVE DISTANCES TO PORT FOR BITUMINOUS COALS

		MILES
<u>U.S.</u>		
CENTRAL APPALACHIA (BY RAIL)		500
UTAH CENTRAL TO LONG BEACH		880
<u>SOUTH AFRICA</u>		300
<u>AUSTRALIA</u>		
NEW SOUTH WALES		110
QUEENSLAND		200
WESTERN CANADA		725
<u>COLOMBIA</u>		100
<u>CHINA</u>		200-500

COMPETITORS DIFFER IN THEIR RELATIVE ADVANTAGES IN THE STEAM COAL MARKET

- o Australia exports about 50 percent of its total coal production and is currently the world's largest coal exporter. Excess capacity is about 10 percent. Mining conditions are favorable, and mines are typically located close to the port. Australia is therefore a low cost supplier. Its costs, combined with its coal quality (typically low sulfur and high BTU content), make it a strong competitor, particularly in the Pacific Rim. However, shipment delays resulting from numerous work stoppages have hurt Australia's reputation as a reliable supplier.
- o South Africa has the world's lowest cost mining operations and a dedicated low cost transportation system that moves coal relatively short distances to the ports. While the energy content of South African coals is low relative to other competitors, the low sulfur content is highly desirable. Recent actions to impose trade sanctions against South Africa and internal political strife cause South Africa's potential contribution in future world coal markets to be uncertain.
- o Poland supplied 39 million tons of coal to Soviet bloc and Western European countries in 1983. Its mining costs are high, but the proximity to its markets helps to keep it competitive. Because its reserve characteristics are not the most favorable and investment capital is lacking, Poland is unlikely to expand its production capacity. If more of its coal is forced to move to the U.S.S.R., its contribution to free world coal supplies is likely to decline.
- o Canada primarily exports metallurgical coals and steam coal is a bi-product. It has an excellent export infrastructure, including a government supported, dedicated transportation system. Because it has excess capacity and high capital costs, no new mines are expected in the next five to ten years.
- o Colombia, while still in the early phases of production, could become a major competitor in the world coal market. It has favorable mining conditions and low sulfur, high BTU coals. Moreover, Colombian mines are proximate to the ports and to European and Asian markets. Its long term viability as a major producer is, however, dependent on its ability to attract foreign capital.
- o China is planning to expand its export potential, with the technical and financial assistance of other countries. Gaining the confidence of investors and importers will be critical to its success. Developing an adequate infrastructure to move the coals produced from its extensive, high quality reserves is also important.
- o The U.S.S.R. is unlikely to expand its minimal coal trade with Europe and Japan. It lacks reserves close to its coasts and is constrained by availability of capital and by changing political objectives.

GOALS

- 0 REDUCE IMPEDIMENTS AND BARRIERS TO AMERICAN COAL EXPORTS
- 0 ADVOCATE INCREASED TRADE IN AMERICAN COAL
- 0 IMPROVE EFFICIENCY AND UNDERSTANDING OF THE USE OF AMERICAN COAL
- 0 ENHANCE ENVIRONMENT THROUGH CLEAN COAL TECHNOLOGY
- 0 SUPPORT IEA ACTIVITIES TO INCREASE COAL USE
- 0 MAINTAIN HIGH VISIBILITY ROLE WITHIN THE DEPARTMENT FOR COAL EXPORTS

INITIATIVES

- o Support efforts to reduce impediments and barriers to American coal exports
 - o o Encourage foreign coal producing nations to reduce subsidies on their domestic production, particularly key European countries.
 - o o Expand studies with coal consuming countries to examine impediments to the movement of U.S. coal and clarify misconceptions of the ability of the logistic system to meet the competitive requirements of foreign coal buyers.
 - o o Support efforts to increase use and flexibility of existing federal export financing programs within current budget constraints.
 - o o Serve as a major participant in the implementation of the Federal Coal Export Commission findings.
- o Advocate increased trade in American coal
 - o o Highlight the importance of coal trade in key bi-lateral energy discussions and push for the maintenance and expansion of purchases of competitive American coal as one way of reducing trade surpluses with the United States.
 - o o Continue to press for implementation of the Reagan-Makason statement.
- o Improve efficiency and understanding of the use of American coal
 - o o Expand technology sharing agreements, like the coal combustion studies with Italy, United Kingdom and the Japanese, to improve the efficiency, knowledge and use of American coal.
 - o o Promote America's coal burning technology through international fora, seminars, fairs and testing agreements.
- o Enhance the environment through clean coal technology
 - o o Ensure that our clean coal technology program has maximum international spinoffs, as it will enhance the environment, increase worldwide coal usage, and improve the attractiveness of U.S. coal. Transfer of technology based on designs for U.S. coals will also help our balance of trade.
- o Support IEA activities to increase coal use
 - o o Ensure high level IEA review of coal production, consumption, and trade issues.
 - o o Raise the level of visibility for the work of the IEA Coal Industry Advisory Board (CIAB).
- o Maintain high visibility role within the Department for coal exports
 - o o Emphasize open door Departmental policy for the coal export industry and affected interest groups to discuss problems, concerns and actions. The emphasis will be on eliminating barriers.
 - o o National Coal Council, an organization which represents all sectors of the coal industry, will continue to provide advice to the Department.
 - o o Establish my office as the focal point for coal export policy in the Department to ensure high level attention and follow through. My first initiatives have been to meet with the U.S. members of the Coal Industry Advisory Board and other coal oriented groups to discuss issues of mutual concern.

Senator WARNER. Mr. Secretary, what is the administration doing, from the White House, your department to your department, to your department, on the Reagan-Nakasone Agreement? Mr. Rockefeller and I are particularly interested in what the administration is going to do to implement that agreement.

Mr. MARTIN. First, I think it is very important that we all hit at various levels in this debate. The President has raised the issue of coal with Prime Minister Nakasone in four of seven meetings. I think that is a pretty good percentage, given the range of agenda items that they have.

We have had several meetings of the United States-Japan Working Group. That hits at about the Under Secretary working level. That is an important place to hit.

I think the toughest nut to crack in this debate is at the mid-level of MITI, and MITI's extension out into industry. I think we have to give more attention there, as issues there are decided and float to the top. I think there is good will at the top. I am convinced of that, to expand coal trade.

But when you get down to the mid-levels and other economic opportunities industry in Japan have with Australia, Canada, or a range of other exporters, it gets very tough. That is why I echo Deputy Secretary Brown's concern that the industry also work with us on this. If we can have the industry working together, if we can get with experts at the mid-level, keep it at ministerial level, keep it at the presidential level, and maybe even among parliamentarians. I know Senator Rockefeller going over, and expressing the concern of the Congress—that we way we hit at all elements of Japanese decision-making. We just have to, as the Senator said, double and redouble our efforts here.

Senator ROCKEFELLER. Mr. Chairman.

Senator WARNER. Yes.

Senator ROCKEFELLER. Could I make one observation? It is evident that this is something of a sensitive area, and I think particularly with the State Department; that is the whole area of the Reagan-Nakasone Agreement. As we all know, that was concluded back in November 1983, and was really aimed not only at the sale of oil from us to them, but the sale of coal from us to them—and that would have been largely Appalachian coal.

I did discuss that directly with the Prime Minister and the Prime Minister did give me direct figures; in fact, direct numbers of tons. I carried them on, then, Mr. Chairman, to the energy people at their International Trade Ministry, and they were very uncomfortable with the fact that I had been spoken to directly by the Prime Minister with specific figures and tonnage in mind. I am not going to use the tonnage because I understand it is very sensitive as between the two governments.

But I am confused, Mr. Chairman, as to why there is this sensitivity. It seems to me that at the time the deal was struck to try and halt the slide of metallurgical coal, we were at about 18 or 17 million tons. We are now down to about 12 or 11 million tons. When I spoke to the energy people in Japan, they elevated their feet out of their chairs. They were shocked to hear this figure used at all.

When I spoke to Nippon Steel, they denied that any such figure existed.

So I am a little confused as to—I don't want to upset high-level relations between the two governments because the Reagan-Nakasone Agreement has to work. It has such a tremendous impact on metallurgical coal, but on the other hand, I would like to know where the agreement stands. I would like to know, are we talking about 11 million tons? Are we talking about 10, about 12? I hear two of three figures from two different public officials.

What is the sensitivity. I mean, coal miners are going out of work by the hundreds and thousands in West Virginia and in Virginia. The agreement was made; the only direct bilateral agreement that the Prime Minister and the President have made in the concurrent terms of their two administrations. It is very clear, it is very important. It is basic to coal, it is based on coal and Alaskan oil and we are not meant to talk about it.

I don't understand that.

Senator WARNER. First, I think Secretary Brown should have an opportunity to address the kind of questions propounded by Senator Rockefeller and myself, and also, if I am not mistaken, the amount of coal imported by Japan during the brief lifetime of this agreement has dropped off.

Mr. BROWN. Mr. Chairman, as I indicated in my remarks, we are very disappointed in what has ensued after the Reagan-Nakasone Agreement. One must remember that the bureaucracy in Japan has been entrenched in the same political system for something like 40 years, and they have seen administrations in Japan and elsewhere come and go and so there is a certain amount of patience with whatever the current policy is and a certain amount of ignoring done of whatever the current leadership in the Japanese Government would seem to want to accomplish.

I am convinced, as has been mentioned, that Prime Nakasone is sincere in his effort to increase the participation by American coal exporters in the Japanese market. The fact is that the Japanese, however, have invested heavily in some other countries to develop coal production facilities which they have under contract, and that investment apparently demands their first loyalty, and the Japanese continue to subsidize their own coal production.

It seems to me that that is contradictory to what the Prime Minister of Japan indicated in his agreement with the President of the United States, and we remind the Japanese of that as a regular matter, and as I indicated, are putting pressure on the Japanese to at least stop the subsidization of their own coal production, and to go back and recognize the agreement that they made between their Prime Minister and our President.

Senator WARNER. How do you remind—I think you just stated one means. It looks as if we are going to have to initiate a stiffer set of reminders.

Mr. BROWN. Soon after I became the Deputy Secretary, Mr. Chairman, I had the opportunity to address this American-Japanese group that grew out of the Reagan-Nakasone Agreement, and my language was comparable to that which I would use on my mother-in-law.

The other people in the Department who negotiate on a regular basis with the Japanese at a lower level, have tried to, on a consistent basis, put their order in with the Japanese bureaucracy at the level where we think the biggest problem lies.

Senator WARNER. Mr. McMinn, we haven't gave you the opportunity to address this question, as you see fit, by incorporating your response and your statement that you have prepared, or addressing it up front.

Mr. McMinn is the Assistant Secretary of Economic Affairs, U.S. Department of State.

STATEMENT OF DOUGLAS W. McMINN, ASSISTANT SECRETARY FOR ECONOMIC AND BUSINESS AFFAIRS, DEPARTMENT OF STATE

Mr. McMINN. Thank you, very much, Mr. Chairman. I think that Secretary Brown has probably stolen as much thunder as there is on that particular question. The only thing I would add in terms of Japan, it has its own system, not unlike the United States. You have to find the keys to working that system. It is multi-faceted, and there are many locks to which we have not found all the keys.

It has to do with dealing at a head-of-state level, which we have done; it has to do with dealing in a subcabinet manner; it has to do with really getting into the heart of the MITI bureaucracy, where there is a great deal of control over how issues either are resolved or not resolved to our satisfaction.

But there also is another key, or lock that we need to find the key to, and that is working their parliamentary system. We haven't done a very good job of that in my view, and that is another area that I think we need to crack.

So it is a combination of a lot of things and continuing to keep that kind of issue very visible.

So, with that, let me turn to my very short oral statement. My colleagues have already covered much of the waterfront, so I would just like to submit my written testimony for the record.

It comes as no surprise that the administration believes that market forces should determine energy prices, production levels and trade. The primary vehicle for U.S. coal export promotion is therefore the private sector. U.S. Government initiatives, both bilateral and multilateral, complement industry efforts by stressing the advantages of U.S. coal as a secure alternative to oil, by seeking a fair opportunity for U.S. producers to compete in foreign markets, and by reducing barriers to coal trade and other market distortions.

The administration urges increase use of coal by all energy importing countries, and intend to emphasize the importance of coal as a reliable energy source in the IEA's third coal review next year, and to press strongly for the eliminating of barriers to coal trade.

Coal subsidies in the United Kingdom, Federal Republic of Germany, France, Belgium, and Spain are permitted under a new European Coal and Steel Community directive, due to expire December 31, 1993. This directive narrows the objectives for which subsidies are permitted within the European Community. The United

States will continue to monitor bilaterally and through the International Energy Agency future actions taken by the European Community Commission which has played a strong role in fostering a more economic coal industry to further reduce state aids. They have a long way to go, but at least there is a little bit of progress.

The two largest producers of subsidized coal in Western Europe are the United Kingdom, and the Federal Republic of Germany. In both countries, there is significant political support for the coal industry as an important employer and economic base.

The United States repeatedly has raised the issue of coal subsidies with both governments. The United Kingdom Government has announced that it plans to discontinue budget subsidies to the coal industry by 1987-88. The United States will continue to encourage West Germany to eliminate uneconomic coal production, as well.

The United States efforts on coal to Japan have centered on the November 1983 Reagan-Nakasone Joint Policy Statement. While not a guarantee of increased coal exports to Japan, the statement ensured regular high-level consultations on bilateral coal trade. The President and Secretary Shultz, among others, have discussed United States coal exports in our frequent bilateral talks with Japan.

Implementation of the 1983 Joint Policy Statement has been disappointing, largely due to the lack of progress on coal. The economic conditions necessary for Japan to increase imports of United States metallurgical coal have not been fulfilled mostly because of stagnation in the Japanese steel industry, and although our coal has declined in price, the declines have been matched and sometimes surpassed by our competitors.

There have been some limited positive developments on coal under the Reagan-Nakasone Statement. Without our persistence, exports of metallurgical coal could have fallen to 6 million metric tons.

On steam coal, the United States has maintained its supply ranking, despite higher average prices of those of our competitors. On long-term steam coal projects, the Japanese private sector has participated actively with United States firms in studies of steam coal exports from Alaska, and is considering a coal slurry pipeline study.

Japan also supports uneconomic domestic coal production, citing as justification a dependence of local economies upon this sector. The recently published Maekawa Report called on Japan to "drastically reduce domestic Japanese coal production and increase coal imports."

Over the years, the United States has called on Japan to make the kind of structural changes outlined in the report, and it is encouraging the implementation of the Maekawa Commission recommendation.

We believe that U.S. initiatives, both bilateral and multilateral, must continue. We will continue to take every possible opportunity to encourage the creation of open coal markets that allow for the economic export of U.S. coal. Yet, U.S. Government initiatives alone cannot compensate for declining demand or higher prices for U.S. coal and its transport.

A frequent remark from our foreign coal buyers is that high inland transport costs interfere with increased purchases of U.S. coal. To be successful, our approach must be multi-faceted, persistent and economically sound. We will continue to work with foreign governments, to develop economic and efficient coal markets, and to eliminate barriers to effective U.S. participation in those markets.

In addition, the domestic coal and coal transportation industries must continue their efforts to enhance their economic potential for export.

Thank you, Mr. Chairman.

[The prepared statement of Mr. McMinn follows:]

U.S. COAL EXPORTS

Douglas W. McMinn
Assistant Secretary of State
for Economic and Business Affairs

Before the

Senate Subcommittee on Natural Resources
Development and Production

August 5, 1986

I would like to thank Chairman Warner and the other members of the Subcommittee for this opportunity to testify on U.S. coal exports.

The Administration believes that market forces should determine energy prices, production levels and trade. The primary vehicle for U.S. coal export promotion is therefore the private sector. Diplomatic initiatives complement industry efforts by stressing the advantages of U.S. coal as a secure alternative to oil, by seeking a fair opportunity for U.S. producers to compete in foreign markets, and by reducing barriers to coal trade and other market distortions. The Administration encourages economic exports of U.S. coal in the International Energy Agency and through direct bilateral approaches. We urge increased use of coal by all energy importing countries and seek improved access to domestic markets of coal importing countries. We urge elimination of subsidies to, and protection of, uneconomic production.

An important factor in international coal trade is the role of exchange rates on coal prices. The depreciation of the South African rand and Australian dollar relative to the U.S. dollar has made U.S. coal less competitive on a U.S. dollar cost basis. Because most of the coal sold in world trade is denominated in U.S. dollars, the exchange rate movements of competitor currencies from 1980 to present have resulted in South African and Australian producers receiving significantly more national currency per ton of coal. This development is a factor in our ability to price U.S. coal on a market competitive basis abroad.

International trade in coal is expected to rise from 283 million metric tons on 1984 to 414 million metric tons in 1995.¹ The majority of growth is expected in the steam coal markets of Western Europe and East Asia. Despite projected increases in demand for the 1990's, substantial excess metallurgical and steam coal production capacity will continue to depress market prices in the near term. The U.S. alone possesses an estimated excess capacity of approximately 100 million metric tons. Current global excess productive capacity exclusive of the U.S. has been placed at about 36 million metric tons, or one fourth of the total yearly international trade in steam coal.²

The principal markets for U.S. coal lie in Western Europe and East Asia, especially Japan. The European Economic Community (EEC) accounted for 38 percent of total U.S. coal

exports in 1985 or 33 million metric tons.³ U.S. exports to all of Western Europe are expected to reach 47 million metric tons in 1995.⁴ Steam coal will comprise most of this expected growth, which may be greater than projected if shortfalls in nuclear capacity result from Western Europe's re-examination of its nuclear energy plans. Italy presents great potential for U.S. coal exports, as steam coal import demand is projected to rise from 11 million metric tons in 1984 to 23 million metric tons in 1995.⁵ Our Embassy in Rome has been particularly active in promoting exports of U. S. coal, with extensive cooperation from both the Department of Commerce and the Department of Energy. Denmark and Belgium are other markets that promise increased steam coal demand and possible opportunities for U.S. steam coal exports.

Diplomatic initiatives to promote U.S. coal exports in Western Europe center on our efforts in the IEA and through bilateral consultations to eliminate uneconomic, subsidized European coal production. The U.S. has taken the lead role in calling for an end to government subsidies to domestic coal production and other barriers to coal trade, which directly and indirectly limit the ability of U.S. producers and exporters to penetrate European markets. We intend to emphasize the importance of coal as a reliable energy source and will press strongly for the elimination of barriers to coal trade in the IEA's Third Coal Review, which is being conducted during the next year. These efforts on coal are part of overall U.S. efforts to encourage structural adjustment towards a more open trading system.

Coal subsidies in the UK, Germany, France, Belgium, and Spain are permitted under a new European Coal and Steel Community directive on State Aids to the Coal Community that will expire on December 31, 1993. The EC Energy Council has just completed work on a new directive that narrows the objectives to which state aids must contribute in order to be legal. The U.S. has encouraged the elimination of operational subsidies, particularly in light of lower oil prices, which increase the economic costs of inefficient coal production. The U.S. will maintain its interest in the direction the European Community takes on this initiative and appreciates the strong role the EC Commission has taken through the new directives on state aids in fostering a more economic coal industry.

The two largest producers of subsidized coal in Western Europe are the United Kingdom and the Federal Republic of

Germany. After a coal miners strike in 1985 largely provoked by concerns over mine closures, the UK made the politically difficult decision to develop a new strategy to restructure the coal industry. Since May 1985, the UK has closed 27 unprofitable collieries and reduced manpower by 20 per cent. Twenty-four pits will be closed and redundancies for 35,000 miners are projected for 1986. Under this plan, pit productivity will be increased to reduce the per ton cost of production 15-20 percent by 1990. HMG has announced that it plans to discontinue budget subsidies to the coal industry by 1987-88 and self-finance new investment by 1990. We hope to see this commitment fulfilled even in the face of domestic pressures to delay such moves due to the impact of lower oil prices on the U.K. economy and the possible effect of the Chernobyl accident on nuclear plans.

The West German government offers a wide variety of subsidies, amounting in 1985 to over DM 5 billion, or \$2.3 billion at DM 2.2 to the dollar. The largest programs aim at offsetting the higher price of using domestic hard coal for the production of electricity, DM 1.332 billion in 1985 or \$605 million, and steel production, DM 1.144 billion in 1985 or \$520 million. Other subsidies are in the form of debt relief programs, export subsidies, adjustment assistance for miners, and grants for new technology and investment.

There is in West Germany a widespread domestic consensus supporting public assistance to the coal industry as an important regional employer and economic base. Coal is a politically sensitive issue in West Germany, which is holding national elections in January.

Facing increased pressure to rationalize domestic mining, the Germans have nevertheless shut down uneconomic mines. About 20,000 miners have been displaced in the past few years. The U.S. was successful in obtaining, during the March 1986 IEA review of West German energy policy, a strong recommendation to eliminate coal subsidies. We will continue to encourage the Germans to eliminate uneconomic coal production, as we have repeatedly in the past.

While we do not anticipate increased U.S. coal exports to France at this time, we note that France has taken major steps to reduce subsidies to its own coal sector and has supported EC Community efforts to eliminate subsidies in all member states. French coal output may fall to 11-14 million metric tons in 1990 from 16.3 million metric tons in 1985. In 1985 a number

of mines closed and production fell by 2 million metric tons, with a labor force reduction of 5,000 jobs. The French anticipate further mine closures in 1986.

The Asian market is our second largest market, with 20 million metric tons of coal exports in 1985. Steam coal exports from the U.S. are projected to double from 3 million metric tons to 6 million metric tons in 1995.⁶ Japan is the world's largest coal importer, accounting for 93 million metric tons of world imports in 1985 (72 million tons of metallurgical coal and 21 million tons of steam coal). Of this amount, the U.S. supplied 13 million metric tons of coal in Japan Fiscal Year (JFY), 12 million tons of metallurgical coal and one million tons of steam coal.⁷

U.S. efforts on exports of coal to Japan have centered on the November 1983 Reagan/Nakasone Joint Policy Statement on Energy. This statement provides a basis for bilateral cooperation in energy trade. Under the Statement, the two countries agreed that the sound expansion of bilateral energy trade will contribute to the further development of a close economic and energy security relationship between the U.S. and Japan. While the Statement was not a guarantee of increased coal exports to Japan, it ensured frequent attention to bilateral coal trade at high levels in both governments. Since November 1983, U.S. officials have met with representatives of Japan regularly at semi-annual meetings of the U.S.-Japan Energy Working Group and at the U.S.-Japan Energy Experts Group. In addition, coal trade has been a subject of discussion by the President and Secretary Shultz in our frequent bilateral talks with Japan.

On metallurgical coal, the Statement notes that due to the role of the U.S. as a major supplier to the Japanese market, both sides would endeavor to maintain the level of Japanese imports from the U.S. Further, Japan expects that imports of competitively priced U.S. metallurgical coal will not continue to decline, as the steel industry would be encouraged to increase U.S. coal imports when conditions permit. The Statement also notes that both sides will encourage private industry to discuss the possibility of concluding long term contracts and jointly developing mines and transportation systems to make U.S. coal more competitive in the Japanese market.

Implementation of the 1983 Joint Policy Statement has been disappointing, largely due to the lack of progress on coal. The economic conditions necessary for Japan to increase imports

of U.S. metallurgical coal have not been fulfilled, mostly because of stagnation in the Japanese steel industry. Japanese steel production in 1984 was 103,740 thousand tons, while Japan Fiscal Year 1986 production estimates are 97,000 - 99,000 thousand tons. Although our coal has declined in price, the declines have been matched and sometimes surpassed by our competitors. While the average CIF Japan price of U.S. metallurgical coal fell from \$70 per metric ton in 1984 to \$69 per metric ton in 1985, prices for competing coal from other countries also have fallen (Australia \$58 to \$55; Canada \$69 to \$67; and South Africa \$50 to \$49.5).⁸ While we have stressed the high quality of U.S. metallurgical coal, demand for such coal has declined, partly due to changes in steel production techniques that allow for increased utilization of lesser grades.

There have been some limited positive developments on coal under the Joint Policy Statement. U.S. commitment to the Statement illustrates the high level of interest we have in the promotion of economic exports of coal. We have encouraged the Japanese to reverse the decline in imports of U.S. metallurgical coal. This effort has not so far been successful, but we believe that without persistent efforts, our exports of metallurgical coal could have fallen to 6 million metric tons, the minimum demand for U.S. metallurgical coal with the qualities requisite for current Japanese steel production techniques. On steam coal, the U.S. has maintained its fourth place ranking, supplying about one million metric tons per year. Holding this position was accomplished even though the average CIF Japan prices for U.S. steam coal were, at \$55.4 per metric ton in 1985, from \$8 to \$16 higher than other major suppliers such as Australia (\$44), Canada (\$44) and South Africa (\$46).⁹ The high BTU content of U.S. steam coal enhances its value in Japan.

On long term steam coal projects, the Japanese private sector has participated actively with U.S. firms in studies involving steam coal exports from Alaska, which the Reagan/Nakasone Statement cites as "a particularly promising area for joint development of energy resources". We hope that these prefeasibility studies will lead to viable, competitive projects that meet the needs of both buyer and seller. A proposed coal slurry pipeline from Wyoming to California is under consideration by groups in both countries.

Japan produced 18 million metric tons of coal, about 14 percent of its total coal requirements, in 1985. The majority was steam coal from marginally productive mines. Although production is uneconomic, the local economy of the coal mining areas is dependent upon continued operations. Domestic steam coal is priced at about double the price of steam coal imports and domestic metallurgical coal at three times the import price. In late 1985, the government standard price for domestic metallurgical coal was 24,000 yen per ton, or \$120 at the then prevailing exchange rate of 200 yen to the dollar, versus 8,500 yen per ton, or \$42.50, the average price of Australian metallurgical coal. Industrial consumers are required to buy up to 20 percent of their supply from domestic sources. Without artificially high prices for domestically produced coal, the opportunities for coal imports to Japan would increase significantly.

In a study called the Maekawa Report, a group of prominent Japanese academicians, former government officials and business leaders recently made a specific recommendation to "drastically reduce domestic (Japanese) coal production and increase coal imports". The U.S. has played an active role over the years by calling on Japan to make structural changes of the type outlined in the report, and we are encouraging early and rigorous implementation of the Maekawa Commission recommendations.

In sum, we believe that diplomatic initiatives, both bilateral and multilateral, have been used effectively to lower barriers to coal trade and to help maintain markets for economic exports of U.S. coal. We will continue to use every possible opportunity to encourage the creation of open coal markets that allow for the economic export of U.S. coal. While diplomacy can be an effective tool in support of a high-quality and reasonably priced product, diplomatic initiatives cannot compensate for declining demand, or higher prices for U.S. coal and its transport. The U.S. coal industry has made significant progress in reducing its prices, but the other elements of the export chain also need to reduce costs to increase our competitiveness. A frequent remark from our foreign coal buyers is that high inland transport costs interfere with increased purchases of U.S. coal.

To be successful, our approach must be multi-faceted, persistent and economically sound. The Administration will continue to work with our coal industry to develop potential coal markets and to eliminate barriers to effective U.S. participation in those markets. The domestic coal and coal transportation industries must continue to seek ways to enhance their economic potential for export. Finally, the U.S. will continue its efforts in multilateral fora to encourage the development of economic and efficient coal markets, calling for the rationalization of uneconomic domestic coal production in the European Community and Japan and urging the expeditious elimination of domestic production subsidies.

FOOTNOTES

- 1 Outlook for U.S. Coal Imports, Energy Information Administration, DOE/EIA-0483, March 1986, Table 2 (adjusted to million metric tons).
- 2 Competition in International Coal Markets, Ing. L. Primicerio, Second U.S.-European Coal Conference, The Hague, April 1985.
- 3 Quarterly Coal Report, Energy Information Administration, DOE/EIA-0121 (854Q), Table 6 (adjusted to million metric tons).
- 4 DOE/EIA-0483, Table 2 (adjusted).
- 5 DOE/EIA-0483, Table 1 (adjusted).
- 6 DOE/EIA-0483, Table 2 (adjusted).
- 7 U.S. - Japan Coal Trade Overview, Department of Commerce, Table 2.
- 8 DOC, Table 6.
- 9 DOC, Table 7.

Senator WARNER. Mr. Secretary, the first question that I would have, and then I will recognize my colleagues, I think you are saying that the Reagan-Nakasone Agreement was really a little bit of damage control; that the situation would have been much worse had it not been for that agreement.

We are trying to look for positive effects. What you are doing is quantifying the downside, the negative effects; it would have been much worse had it not been for the Agreement. Is that your point?

Mr. McMINN. Yes, what I am suggesting is that we are all disappointed, and in fact, we have pressed the Japanese very hard to see that the curve move upward, not downward. But in fact, we believe that absent that statement, that we could well have seen a decline to 6 million metric tons of coal.

I am not suggesting that as somehow an excuse for the Japanese in not purchasing more of our coal. I am just suggesting that there may well have been some positive impact of the statement, and have been.

Senator WARNER. Turning to our other two principal markets in the area, South Korea and Taiwan, has the Administration considered bringing out a comparable agreement between the President and their heads of state or government?

Mr. McMINN. Well, it is something—and Secretary Martin can speak to it—specifically, that is something that I think certainly is worth considering and pursuing. Especially if you look at an economy like Korea, where the steel sector is a very large part of that economy. At a time when Korea is projecting very, very high rates of growth as a result of the lower interest rate, lower oil prices, and the appreciation of the yen, they are doing quite well.

Now would be an opportune time to pursue the Koreans.

Senator WARNER. Did you wish to add to that response, Secretary Martin?

Mr. MARTIN. I would clarify the point about the President's actions. In November 1983, when the President visited Nakasone, he also made a trip to Korea, and at the time he raised the importance of coal with President Chun. We do have a DOE-Korean working group, which we plan to invest a lot of capital in.

Senator WARNER. What about Taiwan?

Mr. BROWN. Mr. Chairman, the bad news of Chernobyl for the nuclear industry is probably good news for the coal industry, and that is particularly true in Korea where there seems to be thought of slowing their nuclear development. But they are still going to have to have some means of generating electricity, and that is going to be coal.

Senator WARNER.: I welcome my colleague here from Oklahoma. Would you care to make any remarks?

Senator NICKLES. Thank you, Mr. Chairman. I just have a couple of brief questions for our panelists. I was wondering, with Japan, I think I heard Mr. McMinn, that you mentioned that Japan supports uneconomical coal development in their country? Is that correct?

Mr. McMINN. Yes, Secretary Brown mentioned that, but that is correct, Senator. They have a subsidy program that operates to support their coal production.

Senator NICKLES. We are very interested in increasing our exports of coal to Japan. I think that there is a demand there, a negative balance of trade, long-term implications of it. I know of a couple of projects that have been in the mill—let me just ask a generic question. What would be the potential—do they have barriers presently to us exporting coal to Japan?

Mr. McMINN. There is no—I don't believe, and I stand to be corrected—I don't believe there are any overt barriers that would be inconsistent with their international obligations.

Senator NICKLES. At the present time, are they importing most of their coal from Australia?

Mr. McMINN. Their major supplier is Australia. That is correct.

Senator NICKLES. Are we exporting any significant amounts to them right now, of coal?

Mr. McMINN. I think that this year, I think the projections are forecast somewhere in the neighborhood of 11 million metric tons.

Mr. MARTIN. I might add, we were exporting around 20 million tons of metallurgical coal in the 1980-81 period. That has now dropped to 12 or 13, and we are exporting about a million tons of steam coal. The growth really is in steam coal potential.

Senator NICKLES. What is the reason why we have lost the volume on the higher grade coal?

Mr. MARTIN. Part of it has been the stagnation in the steel industry, and another has been the bringing on line—

Senator NICKLES. The Japanese steel industry?

Mr. BROWN. The steel industry generally is in trouble, as anybody from Ohio can tell you, because of just the reduction in demand of steel in every million dollars of GNP growth. There is only about half as much demand now for steel as there was 25 years ago in each unit of expansion.

So that is a worldwide problem in terms of the use of metallurgical coal, and the Japanese perhaps are losing some of their market share to the Koreans and others in that part of the world. So that the Japanese import of metallurgical coal has stabilized, or down.

Senator NICKLES. Are you familiar with the West Trans Coal Slurry proposed line?

Mr. BROWN. Vaguely, yes.

Senator NICKLES. I would like for you to get a lot more familiar with it. That is a CO-2 coal slurry line from Wyoming to Long Beach, that would be primarily I think destined for Japan and/or Korea, and Taiwan. I think it has great potential for being, one economical, and also increasing our coal exports, the CO-2 technology would be or could be used for enhanced oil recovery out of the California fields.

I think it is a proposal, and it is both in DOE's shop and Commerce's shop that could help us be competitive and help us increase our coal exports and develop this line. I would encourage you—I have written the Secretary of Commerce, Mac Baldrige, a letter and we have communicated on it, but I would encourage you to take a look at it and see if it might be possible to further develop that. We are looking at mostly private money and development, and, again, I think we can increase our coal exports.

I think with the negative balance of trade that we have with all three—Korea, Japan, and Taiwan—with their need for imported

coal, I would like to see a greater percentage of that—at least a greater percentage of the increased potential demand coming from the United States instead of from Australia and other countries. I think we have that potential to meet the market.

One final question, and this is a little diversion, but it still seems ludicrous to me, Mr. Martin, that we would have a restriction that would prohibit us from selling oil to Japan.

Would you support our efforts legislatively to eliminate that restriction?

Mr. MARTIN. Senator, Bud Brown has just completed a major study, but our analysis shows it is clearly in the economic interest of the United States to export oil to Japan. However, there are other concerns in the maritime interests that would have to be considered, and some of the tankers that might be put out of business are militarily useful. It is a rather complicated question.

From an economic point of view, I certainly support the export of oil to Japan and we have taken administrative action to free up Cooke Inlet oil, as you are aware, which is a small quantity of oil. But I clearly see trade between the United States and Japan, oil-gas-coal, as a major element of reducing the trade deficit over the longer term.

Senator NICKLES. How much money are we talking about? If we had no restrictions as far as oil exports to Japan, what kind of money are we talking about on a per year basis?

Mr. MARTIN. As I recall, it is something on the order of \$10 to \$15 billion, but remember, you would have to import that oil. So as a net balance, you only save in the transportation efficiencies. You do cut tremendously the bilateral trade problem with Japan, but you still have to import it.

Senator NICKLES. It would reduce our trade imbalance with Japan possibly by as much as 30 percent, or 20-some odd percent?

Mr. MARTIN. It is up around—what is now, 35 percent?

Mr. BROWN. Worldwide, oil amounts to about 30 percent of out total trade imbalance.

Senator NICKLES. You would shift it from some countries, from Japan to some other countries.

Mr. BROWN. The question of importing oil from Alaska versus importing oil from Mexico, it seems to me is a security question that puts all the benefit on the Mexican side. Because you bring that Alaskan oil down the west coast of Canada, the United States, Mexico, through the canal, back up into Houston for the most part, and bringing that oil from Mexico and selling the oil to Japan from Alaska makes a lot more economic sense, and I think, considerably more security sense.

Senator NICKLES. One final question. I appreciate the comment and I appreciate the chairman allowing me to question. Mr. Martin, I notice in your statement, you mention a positive expectation for increase coal exports throughout the next 10 years or something.

One editorial comment. I am bothered when I see—and correct me if I am wrong—but has not IMF made some low interest loans with Columbia in a multi-billion dollar frame?

Mr. MARTIN. Eximback has, Senator.

Senator NICKLES. That seems to me to be very detrimental to the domestic coal industry, and I am very bothered by that. Any comment on that?

It seems to me that when we have such tremendous coal resources, we need to develop, we need to export, and then we turn around and make low-interest loans to our competitors, that that seems ludicrous.

Mr. MARTIN. I believe those loans were for equipment sales. So we are helping American manufacturers in that sense.

Senator NICKLES. Wait a minute. Let us figure out who we are helping. Mr. McMinn, you want to touch on that?

Mr. McMINN. First, I guess, a point is that Eximbank, as you know, has specific requirements in terms of assessing the impact on U.S. industry and the economy in financing particular projects. That is sort of a generic test that they have to meet.

With respect to the Columbia project—

Senator NICKLES. How large a project is that?

Mr. McMINN. It is called the Carbocol. It was determined that in the absence of an Eximbank competitive financing package, for U.S. suppliers, that there would be significant economic and employment benefits which would accrue to foreign suppliers as a result of that, not to our own producers and suppliers.

There were financing commitments by a number of other countries, export credit agencies, and the list I have ranges from Canada and Japan to France and West Germany, Belgium and Brazil and Sweden—they were all there for a piece of the action so that what we were doing was simply making sure that our people had a fair chance to compete and the benefits accrue to the United States as a result.

But in general terms, there are specific requirements that we look at in each of these cases.

Senator NICKLES. How large of an export-import loan was made to the Columbian project?

Mr. BROWN. Mr. Nickles, let me answer that question because I am prepared to, and I am not sure the other gentlemen are. Under President Carter's administration, and under an Inter-Agency Coal Task Force, we apparently committed the United States to coal development abroad, including India, Yugoslavia, Turkey, Brazil and Columbia. The Export-Import Bank made a preliminary commitment in November 1981, to loan \$850 million to the Columbia coal firm, Carbocol, for the purchase of United States services and mining equipment for El Cerrejon.

On August 12, 1982, the Bank authorized \$500 million and on September 12, 1982, \$150 million. Both amounts were loaned at 12 percent, payable in 30 semiannual installments, beginning July 10, 1987.

On March 7, 1985, \$200 million was loaned at 11.2 percent, payable in 20 semiannual installments, beginning July 10, 1990. The Bank charged 3.125 percent in fees, and expects to more than cover its costs in a default situation; the loans would be paid for by the Republic of Columbia.

It must be remembered, of course, in fairness to the previous administration that this was done at a time when oil prices were high

and we had experience with the shortage, and there was an effort to develop energy resources elsewhere in the world.

Senator WARNER. At this point, I wonder if I might just interject an observation. During the consideration of the Export-Import Bank authorization bill, Senator Byrd and I and others put an amendment on which, in general terms, requires that the Board inform the Congress on the occasion of any proposed loan, which loans might create a displacement of American jobs.

Now that bill carried that amendment, now in the House, and I would be interested in knowing what the administration's position might be with respect to that amendment, as the House begins its deliberation of their bill.

Mr. BROWN. The Eximbank doesn't come under the Commerce Department, directly, Mr. Chairman, and I am not free to speak to that—I am not informed, I should say, to speak to that. That should be addressed perhaps to somebody else.

Senator WARNER. When I propound questions, it is to the panel as a whole.

Mr. BROWN. It should be noted that approximately \$500 million of sales of U.S. equipment and services have been made to Carbocol as a result of the Export-Import Bank; that is, using those funds and tying them to American product and services, sales.

Eximbank makes the loan to Carbocol—generated something like 21,250 man-years of U.S. jobs that would not have occurred if the loans were not made. Now the question obviously for this panel is, what was the impact or what would be the impact on competition with United States-produced coal, and in point of fact, I think that is part of the reason that the Japanese are making similar investments elsewhere because they help create an energy surplus. It drives down energy prices and that puts them in a more favorable position in terms of world trade for the products that they make with low-cost energy prices.

It would be my hope that we could get the same kind of consideration for the production and improvement of infrastructure in the United States so that our energy prices abroad will be comparably low and competitive.

Senator NICKLES. Mr. Chairman, just a comment. Mr. Brown, would you submit or give me a copy of the data that you have that deals with the loans to Carbocol?

Mr. BROWN. Yes.

Senator NICKLES. As an editorial comment, I am bothered by EXIM's activity and I will tell you that I am not the only Senator. I think Senator Byrd's amendment is indicative that there is other unrest. It deals with coal, it deals with agriculture, and to have you come back and say— isn't this great? We are going to end up selling a lot of the equipment to go down to Colombia, but, yes, we realize, oh, yes; we are going to be increasing production, making low-interest loans to the Colombian Government to increase their competition with the United States producers—I think it is just totally ludicrous policy.

And the same thing applies to the \$450 million loan that we just made to Brazil for their exports of agriculture commodities; the \$350 million low-interest loan to Argentina so they could increase their agriculture exports. I just find it absurd that the directors of

Eximbank are sitting back in their little cubicles loaning out low-interest loans and we have a lot of our domestic—energy industry, domestic agriculture industry—going through the pains that we are having with total world surpluses driving prices so low that we can't stay in business and we are making these kinds of loans.

We have contacted them—I will tell you this—and notified them of some of our objections and they have continued to throw out the money like they had to get rid of it before we acted.

I am personally upset about it, and I can tell you that there is going to be some legislative action, probably stronger than the Byrd amendment to try to either rescind or at least put people on notice that we are going to try to stop this type of lending activity in the future.

Senator WARNER. I think we ought to allow Mr. McMinn at this point to give his observations on the issues raised by my colleague and myself on Eximbank.

Mr. McMINN. Certainly it is a debate that has raged over the last couple of years. It is not something that we are not aware of and what I would like to do is also provide some additional information for you on Eximbank and some of the cases that we have had recently and the justifications.

Senator NICKLES. Please do. Thank you.

Senator WARNER. Well, perhaps you can just give a few examples here, while we are all gathered. I have a feeling that when these papers come up here, somehow the Senators never get around to studying them.

Mr. McMINN. Well, you would like me to give you another example of a case that might affect coal projects, et cetera?

Senator WARNER. Yes.

Mr. McMINN. Well, the only other one that springs to mind, there is one that I am aware of—it has to do with the People's Republic of China and Occidental Petroleum. That is a project that had financing approval in July of 1984. Again, it was determined that in the absence of an Eximbank competitive financing package, there could have been a loss of business to U.S. suppliers, and in fact, that the project would have proceeded, in any event, without Eximbank financing. I think that falls into the same kind of category of projects that are of concern to you.

Senator NICKLES. The Colombia project, that was a joint venture with Exxon?

Mr. McMINN. Yes, I believe that is correct.

Senator NICKLES. We were loaning the money to Colombia, or to Exxon?

Mr. McMINN. I believe it was a preliminary commitment that was extended—

Senator WARNER. It was the Government of Colombia. We had extensive hearings on that here.

Mr. BROWN. Mr. Chairman, this is a complex subject, and as you know, I served in the U.S. Congress. One of the producers of equipment in my old congressional district was Marion Power Shovel which makes the power shovels which extract earth and coal from the ground in strip mine situations.

When the market for that equipment is down, they are a division of Dresser Industries, and my guess is that they would like to sell

anyplace they can, not unless the nuclear power industry today in the United States, which likes to find markets for nuclear power wherever they can be found around the world in order to keep their people working and in order to keep their technology and their capacity up.

I think that has a peripheral benefit, if I may say, Senator Nickles, on the coal-producing industry, to have an American producer of equipment that is still in business when our situation begins to recover. Clearly, some circumspection ought to be followed in the loans that are made so that we don't establish too much low-cost competition that puts our folks out of business.

And that is the balance I think that has to be struck in each one of these circumstances where Eximbank has been involved.

As you know, the President has asked the Congress for a \$300 million kitty, if you will, to compete with the kind of subsidies that other governments are putting into major projects through their version of Eximbank, and he has done that, as I understand, in anticipation of the gap so that we can all back out of these subsidy businesses and get back to a level where these projects are developed strictly on the basis of their economic capacity to compete rather than on any subsidization of the project just to sustain certain industries.

So I think the President's position, at base, is essentially what your position is, and that is, maybe none of these projects should be subsidized by anybody, but when somebody abroad wants to develop a project and pits the United States, France, Germany, and Great Britain against each other, why that is when you start getting into who is going to put up the financing and that is how some of these things come about, and I think the President would like to see a lot of that stopped.

Senator NICKLES. I am not sure the President's position or the Administration's position is what I would like to see because I cannot think of any American firm that has received \$500 or \$150 million loans in 1982, and they do not have to start making payments until 1987 at 12 percent. And that time you had prime rate much higher.

Mr. BROWN. The understanding on these loans is to purchase through American companies.

Senator NICKLES. That is kind of short-sighted. When you are going to have—that may create a few jobs in the interim period, but you are looking at international competition from production of those minds for the next 20 to 40 years.

Again, we didn't find American firms getting low-interest loans with a grace period, where you do not even make payments for several years—we do not see that on the domestic side.

Mr. BROWN. Well, I wish I could say that were the case, but unfortunately, we are sitting on \$91 million down at Commerce Department that we loaned to LTV, hoping that their Chapter 11 status will see them through to be able to repay that, because that was an EDA loan that we guaranteed.

So we are doing some of this with reference to domestic business, I would hasten to point out.

Senator NICKLES. Thank you, Mr. Chairman.

Senator WARNER. Thank you, Senator, for joining us.

I would direct this question to the panel as a whole. Given the very fluid and rapidly changing situation in South Africa—my understanding is that Denmark and France acted to restrict coal imports from that area or that nation.

Does this open up opportunity for American markets, American coal exports to fill the void created by the curtailment of import of South African coal to certain nations in Europe? Mr. McMinn?

Mr. McMinn. I think it is clear that South Africa, being the coal exporter that it is, and the size of its exports, which in 1984 it exported almost 41 million tons of coal, and of that amount, 27 million tons went to Western Europe. So that if there were trade sanctions against South Africa by Europe, it certainly would have a serious effect on their coal trade earnings and their exports.

The question of who would move into those markets and fill that void would depend on the aggressiveness and competitiveness of exporting countries, like the United States.

Senator WARNER. Well, let us hope that Australia and Columbia do not beat us to the punch on those opportunities.

Mr. BROWN. Mr. Chairman, we have sort of a snap-back problem with the South African situation because of the impact, what is going on there, on the relative value of the currency. Currency exchange movements between the first quarter of 1980 and the first quarter of 1986 allowed coal producers from Australia and South Africa to receive significantly more native currency—that is the trading country's currency—per ton of coal, 55 percent and 160 percent respectively.

Assuming the contracts are written in U.S. dollars and firms have not engaged in price cutting to gain market share, the fall in coal prices on the international market reflects oversupply in the world, and producers in the other major coal exporting countries reduce prices in an effort to hold or gain market shares. So the value of our dollar and their currency is significant and, unfortunately, the Krugerrand is way down and that does make the pricing of South African coal somewhat more attractive in some markets that are willing to do business with South Africa.

Senator WARNER. Thank you, Mr. Secretary. At this time, we will now invite, unless there is further testimony that you wish to offer, our second panel and express appreciation to each of you for a very valuable contribution to this hearing.

Panel number 2 consists of Mr. James McGlothlin, President of United Coal Co.; Mr. Pete Moore, Vice Chairman, Coal Exporters Association; and Mr. Thomas Altmeyer, Vice-President, Governmental Affairs, Mining and Reclamation Council of America.

I at this time wish to acquaint you with one of the rules of the U.S. Senate, which limits the hearing of any committee to a period not to exceed two hours once the Senate has convened, unless there is unanimous consent given to enable that committee to go beyond the two-hour point.

At this time, the floor has not given this committee the right to proceed beyond the 2-hour limitation. I am hopeful that it will come, but in view of that, I would urge that each of you capsule your initial response and contribution to about 5 minutes, and then we should know at about 11:10 the ability of this subcommittee to press beyond that 2-hour limit.

I must absent myself at this time because I have the privilege of introducing Judge Scalia to the Judiciary Committee, and as you know, he is the President's nominee to fill the vacancy on the occasion of the retirement of the Chief Justice.

Thank you, very much. The Chair will now be taken over by my colleague from Nevada.

Senator HECHT [presiding]. Good morning.

Mr. James McGlothlin.

STATEMENT OF JAMES W. MCGLOTHLIN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, UNITED COAL CO.

Mr. MCGLOTHLIN. I am James McGlothlin, Chairman and CEO of United Coal Co. I am also Chairman of the National Coal Council. I will be brief in my remarks and paraphrase them if the chairman will permit.

Senator HECHT. Thank you.

Mr. MCGLOTHLIN. In 1985, the U.S. coal industry produced 879 million tons of coal worth \$22 billion; 669 million tons of this coal went to the electric utility industry, or about 76 percent; 92 million tons of the coal was put on the export market, or about 11 to 12 percent. This coal was valued at \$4.46 billion, and certainly helped our trade balance in a positive manner.

Mr. Chairman, in 1979, 250,229 people were employed in the coal industry as production workers. In 1985, only 153,000 men and women were employed as production workers; a decline of some 97,000 American jobs, or approximately 39 percent.

In the 1950's, the United States was certainly the chief contributor to the export coal market of the world. We provided some 50 percent of all exports to the importing nations. Today we provide only 25 percent of that marketplace.

There is great excess capacity in the world marketplace of coal, some 25 percent, we believe. This excess capacity is going to be increased as new Columbia mines and Chinese mines are brought about. As we have just heard, they will certainly be brought about in some ways by American tax dollars.

To increase our exportation of American coal, we believe that several things must happen, but the principal situation is that we must be competitive.

In a world marketplace where supply and demand are the rule, no doubt U.S. coal has become non-competitive in some ways.

In order to be competitive, we have to look at our historical situation. Japan in 1981 imported some 25.9 million tons of American coal, worth \$1.5 billion. In 1985, Japan imported only 15.4 million tons, worth \$769 million.

Just recently, when the United States asked for a voluntary restraint of trade in terms of importing steel, the Japanese were not willing to give much concession in this regard. Yet some of our good trading partners in coal, such as the Brazilians were asked to give nearly 50 percent of the steel they were exporting to the United States.

Japan has clearly not lived up to its part of the trade bargain in our opinion, reducing constantly its take of American coal. In 1986, we have just heard testimony by administration officials, that the

American coal exports to Japan will be reduced to some 11 or 12 million tons, a further decline.

If we are to be competitive though, and if there are answers to our situation, we have to look to Congress for some help. To be competitive, let's look at mine costs first. In the last 5 years since the American coal industry decline began, we have found almost 100 percent increase in coal production in the American mining industry.

We have used new technology, we have better labor relations with our employees, our costs are down some 25 to 30 percent; yet, the price of coal has fallen better than 40 percent. The biggest improvement we could find today in cost could be helped by Congress revisiting SMCRA, the Surface Mine Control Regulation Act.

This act is a good one in terms of environmental controls, and I think we, as an industry, have complied in most respects with it. But it is certainly over done in many respects; redundant and requires too much paperwork, too much reporting to too many agencies. I think if you would talk to those who enforce it, you would find quickly that even they agree that Congress needs to revisit this Act, to give some relaxation, not in environmental controls, but relaxation in bureaucracy to the American mining industry.

Next, Congress passed the Staggers Act, deregulating the railroads, and our transportation costs have not come down because of this deregulation. As a matter of fact, it is hard to deregulate a monopoly that has captive shippers on its lines and where we have no other place to ship our commodity—coal.

An example of what we consider excessive rates is the Norfolk-Southern charges \$6.52 a net ton to transport coal 80 miles from our Belfry operation in eastern Kentucky, to a river terminal located on the Ohio River near Huntington, WV. They charge \$15.72 a net ton, single car rate, from Big Rock, VA, to Lambert's Point, Norfolk, VA to transship our coal, a distance of 420 miles.

At the present time, United Coal Co. is transshipping coal by barge via the Ohio/Mississippi River to the port of New Orleans, LA, 1,560 miles, for a transportation rate of \$5. We have an additional \$1.50 handling charge to place coal in a ship, and after that, we ship the coal to Europe, Amsterdam, Rotterdam, approximately 4,000 miles, for an additional \$4.50.

As you can see, we transport coal 5,500 miles at a cost of \$11 per net ton, landed in Europe, but we are charged \$15.72 for 470 miles, from Big Rock to Norfolk, VA.

We believe you should revisit the Staggers Act. You should do something to help us in terms of rail transportation, or give us an alternate in coal slurry pipeline legislation that would allow the right eminent domain and to build a coal slurry pipeline.

Last, we think you should do something about our relationship with Japan. I don't believe they should continue to flood our country with automobiles and other products, steel products that are made from coal that comes from foreign countries, while they refuse to take our product.

We would be most grateful for any help that Congress could give the American coal industry which is in dire straights at this time.

[The prepared statement of Mr. McGlothlin follows:]

CAN AMERICA COMPETE IN THE
INTERNATIONAL COAL MARKETS?

A PRESENTATION TO THE SUBCOMMITTEE ON NATURAL
RESOURCES DEVELOPMENT AND PRODUCTION OF
THE COMMITTEE ON ENERGY AND NATURAL RESOURCES

August 5, 1986

By

James W. McGlothlin
Chairman and CEO
United Coal Company
Bristol, Virginia

CAN AMERICA COMPETE IN THE
INTERNATIONAL COAL MARKETS?

Gentlemen, I am James W. McGlothlin, Chairman and CEO of United Coal Company of Bristol, Virginia; and I am also Chairman of the National Coal Council. The thoughts I am about to convey are mine individually and do not necessarily represent those of the National Coal Council.

In 1985, the U.S. coal industry produced over 879 million short tons of coal with a total value at the mine of about \$22 billion. The largest market for coal was the electric utility industry which purchased about 669 million tons or 76 percent of the total mined.

The next largest market was exports, totalling almost 92 million tons, with an export value of \$4.46 billion (free along side, or f.a.s.). Although the U.S. coal industry historically has exported an average of about 10 percent of production and in 1985 achieved this average, there are clear indications that U.S. coal is not generally competitive in world steam coal markets and is rapidly losing its competitiveness in metallurgical coal markets.

In addition to supplying about 23.7 percent of the total energy consumed in the U.S., coal mining provides direct employment for some 187,000 persons and about 164,000 indirect jobs in supporting industries. Coal is exported to 61 countries, and export shipments add favorably to the U.S. international trade balance.

During the 1970's, annual U.S. coal production fluctuated from 561 million tons to 781 million tons. Since then, coal production has risen significantly. In 1980, coal production surpassed 800 million

tons for the first time in history; in 1984 it reached a record 895.9 million tons. According to some estimates, the U.S. has the largest recoverable coal reserves. The U.S. was also the world's largest coal exporter. However, in 1984, the U.S. was displaced as the leading exporter of coal by Australia. Consequently, the industry in recent years has suffered from falling prices on the international market and weakened demand and oversupply in the domestic markets. As a result, operating profits for many companies are low.

While coal production has risen steadily in recent years, employment in the coal mining industry has undergone a precipitous decline. According to the U.S. Mine Safety and Health Administration, coal mine employment reached a peak of 250,226 production workers (excluding office personnel) in 1979. After several years of slow decline, employment plummeted in the 1982-1983 recession and never recovered to pre-recession levels. Preliminary 1985 data indicate that only about 153,000 production workers are employed, a decline of over 97,000 jobs (39%) from the 1979 level. In addition to the direct employment of coal miners, the coal industry indirectly provides employment in industries that provide support and services to the mining sector. Among these industries are mining machinery, electrical machinery, explosives, concrete products, wood products, petroleum products and fabricated metals.

The United States has historically exported more coal annually than any other country. However, the U.S. share of the world market declined from an average of 50% during the '50's to about 25% currently. This decline occurred for a variety of reasons. Many coal producing countries by the early '80's had built up sizeable excess production and

export capacity and were willing to undercut world prices to increase market share. Concurrently, the U.S. began losing its competitiveness because of the increasing value of the dollar compared to other exporting country currencies, increased mining costs to comply with regulatory requirements, and higher inland transportation costs.

The development of a significant international market in met coal followed World War II with the need to rebuild the steel industries in Europe and Japan. The United States became the major exporter to both these markets and until the late 1970's, supplied from 30% to 50% of the import demand. The other large suppliers were Poland, the USSR, and Australia. In the early 1980's, new production in Canada and Australia eroded the dominant supplier role of the United States.

The U.S. hoped to maintain its market share, but it has been declining since the record sales of 1981 for many of the same reasons mentioned previously. The U.S. sold only 11.8 million tons of steam coal overseas (excluding Canada) in 1984 and 23 million tons in 1985. Australia, South Africa, and Poland surpassed the United States in steam coal exports during those years.

In Europe before the mid-'70's, Poland was the major supplier followed by the U.S., while Australia held the top position in the Far East. By the mid-'80's, South Africa captured the top position in Europe and the second position behind Australia, which became the dominant supplier in the Far East. The U.S. is now the third largest supplier in both markets. In the late '80's, Canada, Colombia and the Peoples Republic of China are expected to capture a substantial share of the seaborne market, displacing for the most part U.S. market share.

There is a substantial excess of world steam coal production capacity. Various estimates have been made showing a total of about 40 million tons excluding the U.S. excess capacity. An excess of 40 million tons is currently about one-fourth of the total volume of international trade in steam coal. This surplus capacity can produce serious implications for the U.S. coal industry.

For instance, Japanese coal consumers must purchase expensive domestic coal before importing less expensive foreign coal. The cost of domestic coal is \$20 to \$25 per ton higher than the delivered cost of foreign coal. The Ministry of International Trade and Industry administers a system of import licenses for which coal consumers must purchase a designated share of their coal requirements from domestic coal--approximately 20% for the cement industry and 70% for the electric utility industry. However, the Ministry controls only the quantities of imports, not their sources or prices. To ensure the security of Japan's future coal supplies, the government also stresses diversity of supply source and encourages joint ventures in overseas coal mines and development of the infrastructure with financial assistance from the New Energy Development Organization and with loans at concessionary interest rates through Japan's Export-Import Bank.

Japanese steel mills coordinate their imports, and they are often able to exert considerable bargaining power as the world's largest purchaser of met coal. The Japanese electric power industry does not coordinate its coal imports; but the establishment of the Japan Coal Development Company, with potential access to 50% of the power industry's requirements for steam coal, presents an opportunity for coordinated purchases. These procurement practices dramatically affect the exportation

of U.S. coals to international customers such as Japan. To demonstrate these arguments, 25.9 million tons of U.S. coal having a value of \$1.5 billion were exported to Japan in 1981. This tonnage represented 23% of the total U.S. coal exports. However, in 1985, only 15.4 million tons of U.S. coal having a value of \$769 million were exported to Japan. This tonnage in 1985 represented only 16% of the total U.S. coal exports, a decrease of 7% compared to 1981. Interestingly enough, during this same period, steel imports from Japan to the U.S. were decreased by less than 4%.

The United States coal industry in the foreseeable future is expected to remain a major supplier of coal to both the met and steam world coal markets. According to March 1986 projections by the U.S. Energy Information Administration, the world coal import demand is expected to continue to increase during the next 10 years, reaching 455 million tons by 1995, up from 312 million tons in 1984. However, the U.S. share is expected to decline from 26% to 22%. The U.S. market share will be primarily determined by the cost of mining and transporting coal to the foreign port in competing in both the met and steam coal markets in both Europe and the Pacific Rim.

The role of U.S. coal in world markets depends primarily on the competitiveness of U.S. coal vis-a-vis other exporters. This, in turn, is dependent upon production and transportation cost factors, some of which are affected by federal and state government regulations. There are also a number of government policies, such as taxation, that affect costs which are beyond the control of the coal exporting chain. In addition, there are many international trade factors which affect the

competitive position of U.S. exporters. Among the major ones are currency exchange rates, ocean freight costs, subsidized capital and operating costs of competing country exporters, world prices for oil and gas, importing country policies and consumer behavior.

Federal government policies affect the cost of mining and transporting coal, thus the ability to compete in world markets. The principal laws and regulations that affect production costs are those that establish health, tax, workers compensation, safety, and environmental standards for coal mines. In a recent study comparing the cost of mining coal in Colombia with that in the United States, it was shown that the unregulated Colombian mines had a \$2.00 to \$5.00 per ton compliance cost advantage, depending on the method of mining.

Another area affecting total mine-mouth price is the cost of federal and state tax liabilities. Tax regimes vary considerably among states, with the major taxes being severance and property. Severance taxes are the most controversial, as they largely determine the ability of coal-producing states to compete with each other. The principal federal taxes are income, black lung and reclamation fees (not strictly a tax but treated so). Although these taxes apply uniformly to the U.S. industry, they add to the total cost of mining. There are also differences in the royalty fees for surface (12.5% of the mine-mouth price) and underground mines (8% of the mine-mouth price). In the Colombian study referred to earlier, it was found that the difference between the tax burden on Colombian and U.S. mines was the primary reason for the approximately 15% cost advantage of comparable Colombian mines over U.S. mines. The major tax differences were due to state severance and property taxes and federal black lung and income taxes.

The significant transportation issues center on railroad deregulation, maintenance and improvement of inland waterways, port improvements, coal slurry eminent domain, and cargo preference. These issues are long standing and controversial, particularly the regulation of railroads to protect captive shippers. The resolution of each of these issues will ultimately affect the final delivered cost of the coal to the customer and the competitiveness of the coal.

The Staggers Rail Act of 1980 provided the railroad industry with far greater rate freedom in the recognition that transportation markets are highly competitive. Much railroad traffic fell below a legislatively-established jurisdictional threshold; railroads and shippers became free to enter into contract rates without ICC interference. Protection was provided to those shippers whose rates remained under ICC jurisdiction.

If rail movements of export coal are not under contract, they remain regulated to the extent they exceed a statutory threshold and can be proven unreasonable according to the principles laid out in the Staggers Act. However, the Association of American Railroads has reported that by mid-1985, 86% of export coal was moving under contract, thus relatively few rail shipments of export coal are under the jurisdiction of the regulatory powers of the Interstate Commerce Commission.

Within the United States, the transportation increment of total cost of coal delivered to the export port can be a significant portion of the FOB price. Thus, as attention focuses on reducing the delivered cost of U.S. coal into the international market in order to enhance sales, transportation costs are an important component of supply costs. Railroads affirm that over-pricing of rail transport would

inhibit export sales. They note that such actions would be counter-productive to railroads seeking expanded volumes of business. Export coal shippers are concerned that rail rates are even now affecting the ability of certain U.S. coals to compete in the world market. Coal exporters assert that railroads are insensitive to expanding markets for U.S. coal through reducing rates and that railroads seek to maximize their rate of return rather than generate greater profits.

Pricing clearly must balance competitive requirements with those associated with achieving an adequate return on investment and assuring long-term financial viability. Railroads in the past have suffered economically. Now that the railroads have greater freedom to price according to the competition, it should be in their best interests to provide service for all coal shipments where the rail rates exceed marginal costs. However, I am not convinced this is occurring.

An example of what we consider excessive rates is that the Norfolk Southern charges \$6.52/NT to transport coal 80 miles from our Belfry operation in Eastern Kentucky to a river terminal located on the Ohio river near Huntington, West Virginia. They charge \$15.72/NT single car rate from Big Rock (Buchanan County, Virginia) to Lambert's Point, Norfolk, Virginia, a distance of 420 miles. At the present time, United Coal Company is transshipping coal by barge via the Ohio/Mississippi river to the port of New Orleans, Louisiana, 1560 miles for a transportation rate of \$5.00/NT. We have an additional \$1.50 handling charge for stockpiling and reloading this coal onto an ocean-going vessel. The ocean vessel transportation rate from New Orleans to Europe, ARA (Amsterdam, Rotterdam, Antwerp), a distance of approximately 4000 miles, is an additional cost of \$4.50/NT. As you can see, we can transport coal 5500

miles at a cost of \$11.00/NT landed in Europe, but are charged \$15.72/NT single car rate from Buchanan County, Virginia, to Norfolk, Virginia.

The price elasticity of demand for U.S. coal by foreign buyers will vary by customer and by compensating factors, not all of which are economically founded. However, our foreign customers continue to seek assurance from this Administration that it is the government's policy to promote efficiency in all cost elements, including those of rail transport.

Mining costs associated with environmental regulations vary considerably depending upon the producing region and method of mining. To the extent that other coal-exporting countries do not impose similar environmental standards, the U.S. coal exporter is less competitive by that incremental cost.

The main environmental requirements were established by the Surface Mining Control and Reclamation Act of 1977, which set forth detailed standards and procedures for mine operators aimed at minimizing the environmental damage from both surface and underground mines. Additionally, coal production is significantly impacted by provisions of the Clean Air Act, the Clean Water Act, the Mineral Leasing Act, the Endangered Species Act, and the National Environmental Policy Act in addition to other Federal environmental and land use laws.

The major provisions of the SMCRA include mandatory submission of detailed permit applications containing reclamation plans and procedures during and after completion of mining discrete sections. These applications must be approved by the Department of the Interior or the individual state before mining can commence; both government entities inspect the operation and enforce the mining plan as approved.

The U.S. coal industry has, for the most part, successfully met the very stringent environmental standards imposed by the Act and

subsequent regulations promulgated under the Act's provisions. Most of these standards have now become an integral part of mining practices. However, the coal industry, as well as the National Academy of Sciences, has identified a number of environmental requirements that go beyond "good engineering practices" and as such add considerable costs which are unnecessary. To the extent that unnecessary costs can be identified and requirements modified to eliminate them, such steps would reduce mine operating costs and make U.S. coal more competitive in the world markets.

The actions taken by this Administration and by the Congress will have a dramatic impact upon the U.S. coal industry's ability to compete in the international marketplace. The regulation of mining, the purchase policies of our trading partners such as Japan, and the regulation of rail transportation rates require your further consideration.

Senator HECHT. Thank you, very much, and thank you for summarizing so eloquently.

Mr. Pete Moore.

STATEMENT OF C.R. "PETE" MOORE, ON BEHALF OF THE COAL EXPORTERS ASSOCIATION AND THE WESTERN COAL COUNCIL

Mr. MOORE. Thank you, Mr. Chairman, I am pleased to be here to present this statement on behalf of both the Coal Exporters Association and the Western Coal Council. I also will summarize my statement and ask that the entire statement be placed in the record.

Senator HECHT. It will be placed in the record.

Mr. MOORE. Today I would like to focus on two interrelated areas; the prospects for U.S. coal in the world market over the next 5 years, and the effect that certain selected actions that could be taken by government and industry, separately and collectively, would have in maintaining and possibly improving those prospects.

Finally, I will conclude with a few remarks about U. S. coal trade with Japan.

Over the past decade, the volume of coal trade has almost doubled from \$180 million to \$360 million. The world coal market has evolved from a market that was primarily metallurgical coal to a market where half the trade is now steam coal.

The U.S. coal exporter holds the unenviable position as one of the high-cost swing suppliers in the world market. Over the past 5 years, the U.S. share of the market declined from just over 35 percent to under 25 percent. U.S. exports have not kept up with the overall increase in demand, nor the change in world coal market from a predominantly met coal market to a steam coal market.

Why is a good question. First, the U.S. competes with countries such as South Africa and Australia which can sell at lower prices in many markets due to lower production and transportation costs, and shorter transportation business.

Second, the U.S. competes with countries selling at lower prices because cost of production and transportation are subsidized, as is the case in Europe, or which price coal at low levels for political reasons, such as the case in Poland.

The U.S. competes with countries whose governments encourage the purchase of their country's coal through offer of access to markets. Russia and China offer a steel market to Brazil or Japan in exchange for coal, as a prime example.

All other coal exporting countries have been able to cut delivered prices even while realizing a greater return because of the relationship of the U.S. dollar to other currency.

In 1985, the U.S. was the world's second largest exporter, shipping just over 91 million tons of coal to Canada and overseas markets. Over the past few years, the average price of metallurgical coal for export overseas declined from \$59 per ton to the current \$47 per ton.

Steam coal prices similarly declined from \$46 to the current \$39.

There are several ideas in which positive action by the U.S. Congress and the administration could make a difference. The first area is market access. The U.S. offers the largest and most lucra-

tive market in the world for manufactured goods and services. Access to this market is not being used by the administration to promote U.S. exports, as is being done by governments in other coal exporting countries.

Steel is a case in point and is especially related to coal. The U.S. steel market is limited to foreign producers through a series of negotiated voluntary restraint agreements. Under this system, the largest share of our steel market reserved for imports has been awarded to countries such as Japan, that are now strongly reducing the purchases of U.S. coal.

Conversely, the smallest share of our steel import market is allocated to countries such as Korea or Brazil that would like to increase purchase of U.S. coal. We believe these steel allocations could be used to further coal sales as is being done by other coal exporting countries.

Please do not misunderstand our position. The coal industry strongly supports the principles of fair trade and has never endorsed imposition of steel quotas. But as steel quotas are an established fact, the National Coal Association and the Coal Exporters Association would support legislation which, within the context of the existing system, instruct the Special Trade Representative to consider the amount of U.S. coal purchased when negotiating steel agreements with countries that are not now covered by agreement or when renegotiating the steel import quotas.

A second area in which government could use existing programs to promote additional coal sales is through the coordination of Exim bank financing of coal use facilities with the requirement that U. S. coal be utilized in those facilities.

Finally, I would like to comment on the status of the U.S. coal trade with Japan and the implementation of the Reagan-Nakasone Joint Policy Statement. This agreement called for increased cooperation between the United States and Japanese Governments and our respective private industries to increase trade in oil, natural gas and especially coal.

It is an understatement to say that implementation of this agreement has been disappointing.

Since Japan Fiscal Year 1983, the year the agreement was signed, Japanese imports of United States metallurgical coal have fallen from 17 million tons to 14 million tons last year, and will fall even further to the 10 to 11 million ton range this year. The excuse that the Japanese economy and conditions in the steel industry do not support an increase in U.S. imports is not a sufficient excuse for this sharp decline.

Imports have steam coal have not increased to Japan either, but have remained at 1 million tons per year, despite an increase in Japanese purchase of steam coal from 16 to 23 million tons. As recently as last May, the coal industry was told that the Japanese will not now, nor do they intend to increase purchase of U.S. coal, even if the coal is price competitive.

As a result of these statements, private industry has concluded there is no justification for discussion with Japanese about coal trade on a private sector level, and if we have had the United States-Japan Standing Technical Committee that has had meetings for over the last 2 to 3 years.

We have concluded the only way that the Japanese will maintain the purchase of United States met coal, or increase the purchase of United States steam coal is through direct and continual public pressure on the part of the administration. This has been notably lacking in the past year, especially, and the results of this effort are very plain.

Semiannual meetings of the United States-Japan Working Group, held with no publicity, or with one or two word mention of coal during head-of-state visits are simply not sufficient effort. The administration must be firm and the agreement must be renegotiated to establish firm objectives for the future purchase of United States coal and to establish benchmarks against which progress toward these objectives can be measured.

If this is not done, the Joint Policy Statement Agreement, for all practical purposes, is worth nothing.

I thank you for the opportunity to furnish these comments.

[The prepared statement of Mr. Moore follows:]

NATIONAL COAL ASSOCIATION

STATEMENT OF
C. R. "PETE" MOORE
SENIOR VICE PRESIDENT
OLD BEN COAL COMPANY
ON BEHALF OF THE
COAL EXPORTERS ASSOCIATION OF THE U.S.

THE POTENTIAL FOR U.S. COAL IN THE WORLD MARKET

before the
NATURAL RESOURCES DEVELOPMENT & PRODUCTION SUBCOMMITTEE
of the
SENATE ENERGY & NATURAL RESOURCES COMMITTEE

AUGUST 5, 1986

Thank you Mr. Chairman. My name is Pete Moore, I am Senior Vice President Marketing, Old Ben Coal Company and Vice Chairman of the U.S. Coal Exporters Association. I am pleased to be here today and want to commend you for holding these oversight hearings on the prospects for the export of U.S. coal. It is always useful to evaluate the United States position in the world coal market and to examine the future prospects for U.S. coal in that market. We welcome the opportunity to explore, with the Congress and the Administration, ideas that will make our coal more competitive and enable us to thus increase our market opportunities abroad.

I am presenting this statement on behalf of the Coal Exporters Association, a national organization affiliated with the National Coal Association, whose coal producer and trader members are the exporters of approximately 80 percent of the coal shipped from the U.S. today. CEA was pleased to be asked to represent the Western Coal Export Council (WCEC) at these hearings and this statement is being presented on their behalf as well. WCEC is an organization of coal producers, transporters and port interests who export coal from the western part of the United States and from Alaska.

I would like to focus on two interrelated areas: the prospects for United States coal in the world market over the

next five years and the effect that certain selected actions that could be taken by government and by industry separately and collectively, would have in maintaining and possibly improving the market prospects for U.S. exporters. I will conclude my statement with a few remarks about United States coal trade with Japan.

Before looking at the future, I would like to make a brief comment from a historical perspective.

The last decade has been a decade of change in the international coal market. In 1973, a year marked by oil supply disruptions and oil price increases, world coal trade approximated 195 million tons. Over 80 percent of this coal was metallurgical grade coal purchased by steel mills in Europe and Japan. The 40 million tons of steam coal crossing country borders was almost all trade between Canada and the United States and trade between European nations.

By 1985, world coal trade had almost doubled to 365 million short tons. Most of the growth in coal trade has been in steam coal, and for the first time in history, over one half the coal on the market in 1985, 190 million tons, was steam coal. The total market for metallurgical coal has not increased, although market locations have shifted. New metallurgical coal markets have been developed in South America and in Korea at the same

time that markets in the traditional steel producing countries have declined.

A decade ago supply and demand held a relative balance. However, in the last five years especially, coal production and export capacity has come on line in Australia, Canada, South Africa, the USSR, China and Columbia at a far faster rate than the increase in demand. As a result, a balanced market has changed to a situation in which the capacity to export coal--or supply--exceeds the demand for import coal by at least 40 million tons excluding United States export capacity. Various estimates put excess U.S. export capacity at 70 million tons putting total coal export capacity at some 110 million tons greater than current demand. Much of this capacity can serve either the met or the steam coal market.

This excess capacity has had its effect on the market. Prices for coal have fallen sharply in the past three years to such low levels that many U.S. producers are not even able to cover variable costs. The market is rapidly becoming one based on short term or spot sales rather than one based on longer term contractual commitments. In such a market prices can fluctuate rapidly, in the upward as well as the downward direction. Quality control, and thus utility plant operation, is more difficult as supply sources can change from shipment to shipment; investment in new, or even replacement production capacity is discouraged.

In short, a spot market is a less stable, less reliable, market than is one based on long term supply demand relationships.

These trends, and the trade and market patterns that have developed over the last decade are expected to prevail over the next five years.

Steam coal demand and thus trade, will be affected by the down turn in oil prices but will continue to increase, although at a far less rapid pace than in the late 1970's and early 80's. The greater share of new demand will occur in Pacific Rim nations. Further sharp increases in steam coal use in Europe are unlikely because much capacity has already been shifted to coal and because economic growth is somewhat lower than in the Pacific.

Metallurgical coal trade will stagnate in total due to lower demand for steel and technological advances which reduce the amount of coal required for steelmaking. The shift away from the traditional steel producing countries towards the new steel industries in South America, Korea, and other countries will continue.

Unless there is an unforeseen disruption in supply

capability, the world capacity to produce and export coal will continue to exceed demand for imported coal for some years in the future. Spot and short term sales will continue to predominate.

What is the United States position in this new world coal market?

The United States coal exporter holds the unenviable position as one of the high cost swing suppliers in the world market. We have not been able to maintain our traditional position as the world's largest coal exporter with one-third or more of the market. Although the absolute quantity exported from the east, midwest and gulf regions have increased over the last several years, the increase has not kept pace with either the overall increase in demand or the change in the world coal market structure from a predominately met coal market to a steam coal market. It has proven to be impossible for our western reserves to enter the export market on even a short term basis. As a result the United States market share has dropped from over 35 percent to just under 25 percent.

There are several reasons for this decline:

- coal is readily available from countries that can sell at lower delivered prices because cost of production is lower and because the cost of transportation, especially inland

transportation is lower;

- coal is available from countries where production is subsidized in some way by local governments; with countries that sell at prices that are set at artificially low levels for political reasons, such as the need for hard currency; with suppliers that are bringing new capacity on line and who set their price to buy into, or to penetrate, the market;
- regardless of cost structure, because coal is sold in U.S. dollars, it has been possible for competitors to cut the dollar price of their coal on a delivered basis while realizing a greater return in their native currency; our competitors have seen the benefit of changes in the U.S. currency rates, our exporters have not.
- finally, the governments of competing coal exporting countries often use whatever means possible, including market access, to encourage purchase from their own coal industries.

United States coals have many advantages, including advantages of quality, diversity of supply, reliability and security. In today's market however, these advantages are not sufficient to offset the price or political considerations which

are part of a buyer's purchase decision.

A few illustrations will emphasize the above points. In the steam coal market:

- the new Pacific Rim markets are being served primarily by Australia. Mine mouth prices are lower, inland transportation costs are lower, ocean rates are lower due to shorter distances; Australian ports have the depth to allow full loading vessels; our reserves of western steam coal, with the possible exception of Alaska, can not compete due to long transportation distances and high inland transport costs.
- In 1984 and 1985, Australia was able to make inroads in the European market, traditionally slanted to the U.S., due to a lower cost structure, depressed ocean freight rates and the very high value of the U.S. dollar;
- South African coal, which is less expensive to mine than is U.S. coal, is being put on the market in both Europe and in the Pacific at extremely low prices, in part to offset political pressures against buying products from that country.

In the met coal market:

- the same competitive price competition facing steam coal is evident in the met coal market. In the Pacific Rim, the U.S. competes with lower cost Australia, with some Canadian coals that are also cheaper on a delivered basis and with new production in China and the USSR; In Europe, competition comes from Australia, and from subsidized indigenous coal industries;
- the offer of market access for steel in exchange for coal purchases the "coal/steel tie" is making a difference in the customers' decisions on the source of coal. Unfortunately, the U.S. market is effectively closed to new foreign steel sales due to the effective existence of steel import quotas.

It will take a concerted effort on the part of the U.S. industry and the U.S. Congress and the Administration to offset these factors and to prevent further decline in the U.S. participation in the world market over the next five years.

Although the current and future outlook for U.S. coal is far from bright, this should not be viewed with total pessimism.

In 1985, just over 91 million tons of U.S. coal were shipped to Canada and to destinations overseas. This export level has

been exceeded only twice in our history - in 1981 and 1982 when the sudden surge in world demand for steam coal and unavailability of coal from other sources combined to create an export market for over 100 million tons of U.S. coals.

In 1985, we shipped over 75 million tons from east and gulf coast coal ports to customers in the Far East, in Europe, and in South America. Approximately 71 percent, 53 million tons, was metallurgical coal and 29 percent, 22 million tons, was steam coal.

1985 shipments were a sharp improvement in quantity over export levels of 1983 and 1984 when 60 million and 61 million tons were shipped to overseas destinations from the U.S.

The reasons for this increase, which occurred primarily in steam coal shipments to Europe, are several and include the sharp increase in import demand of utilities in the EEC due to the strike related decline in production in the U.K. and the decline in coal shipments from Poland.

The single most important factor underlying the 1985 increase in U.S. coal shipments however, was the willingness of the coal producer and transporter to be innovative and to price aggressively to meet the competition. This has been possible for several reasons:

- Over the past several years in response to anticipate increase in demand, investments have been made in equipment and mining and transportation facilities which have contributed to increased productivity and thus to lower costs;
- Labor management relations have improved, efficiency and productivity has increased;
- Inland transportation costs have been cut wherever possible through the use of transportation contracts or alternative transportation routes, the coal exporting industry now depends less on rail shipments to east coast ports and to a greater extent on barges and the gulf coast;
- The capacity of the U.S. coal port loading facilities has been more than doubled; terminal operations are more efficient cutting port costs substantially;
- The capability to top off large vessels has been developed and is in use; in the future, channels and ports and harbors may be deepened to allow full loading of cape sized vessels at the port.
- Finally, when the effects of these measures have been

insufficient to meet the competition, to stay in the market, the U.S. coal producer/exporter has often reduced prices to levels that do not even cover variable costs.

These actions have had results. The average f.o.b.t price of met coal for export overseas has declined from an average \$59 per short ton in January, 1984 to the current \$47 per ton. Steam coal prices have declined from \$46 per ton to the current \$39.

In 1986, U.S. exports overseas will be at about the same level as 1985. This achievement will not be an easy achievement as competition remains strong, and prices continue to drop.

The coal exporting industry, whether in the Appalachian states, the midwest or the west, knows that achieving relative price competitiveness, on a c.i.f. basis, is a basic requirement for participation in both the met and the steam coal trade. We believe that significant progress towards that goal has been made as the data illustrate but we cannot expect that prices will show the same magnitude of decline in 1986 as was experienced in 1985. The coal industry will continue to contain costs but we cannot do much more to unilaterally decrease costs.

The U.S. government also has an important role in ensuring the relative price competitiveness of U.S. coal as there are a number of factors over which the coal producer has little or no

influence but which affect the price at which U.S. coal can be delivered.

Regulatory requirements such as those under SMACRA, the Clean Air Act, and other laws impose costs on the production or transportation of coal; state and federal tax income tax and severance tax levels are not necessarily designed with the export market in mind.

Federal taxes would be increased significantly under certain provisions of the tax bill now being considered in the conference committee. A recent industry study of the House passed bill shows that it would increase the coal industry's tax liability for the 1986-90 period by \$1.6 billion or by 75 percent when compared with current tax law.

International coal markets are expected to remain very cost competitive for the foreseeable future due to continued surplus production capacity overseas, declining oil prices and relatively low energy growth rates in major coal importing countries. Within this environment, even a modest increase in the cost of producing coal for the export market whether the result of an action by the Administration or the Congress, will decrease our competitiveness in the export market. The coal industry can no longer offset these cost increases with reductions in production costs.

Beyond price considerations, the U.S. exporter must compete with the effects of actions taken by the governments of both producing and consuming nations. Unfortunately, in the area of trade we do not compete in a fair market or on a level playing field, and in this arena actions by the U.S. government could have a significant impact on market opportunities.

There are several ways in which positive action by the U.S. Congress and the Administration could make a difference.

The first area is market access. The U.S. offers the largest and most lucrative market in the world for manufactured goods and services. Access to this market is not being used by the Administration to promote U.S. exports as is being done by governments in other coal exporting countries.

Steel is a case in point and is especially related to coal. The United States steel market is limited to foreign producers through a series of negotiated voluntary restraint agreements. However, under this system the largest share of our steel market reserved for imports has been awarded to countries that are now reducing their purchases of U.S. coal. Conversely, the smallest share of our steel import market is allocated to countries that would like to increase purchase of U.S. coal.

Brazil and Japan are two examples. Almost one quarter of allowed steel imports are allocated to Japan--a country which has reduced purchase of U.S. metallurgical coal from 27 million tons to 10 million tons since 1982.

Brazil, a principal customer for U.S. coal is allowed just about 1 percent of our total steel market or 5 percent of allowed imports. Brazilian purchases of U.S. coal have more than doubled from 2 1/2 to almost 6 million tons in the last four years, and Brazil would buy additional coal from us if they could ship more steel to the U.S. The Chinese and Russians are offering the Brazilians a market for steel in exchange for coal. This offer has resulting in our customer's reevaluation of their purchase policy and could conceivably cost the U.S. exporter a portion of the future Brazilian market.

Do not misunderstand our position. The coal industry strongly supports the principals of fair trade and has never endorsed imposition of steel quotas. But as steel quotas are an established fact, NCA/CEA supports legislation which would, within the context of the existing system, instruct the Special Trade Representative to consider the amount of U.S. coal purchased when negotiating steel agreements with countries not now covered by an agreement or when renegotiating steel import quotas as they might be required by legislation or for other reasons.

A second area in which government could use existing programs to promote additional coal sales is through the link of Export Import or AID financing of coal use facilities with the requirement that U.S. coal be used in those facilities.

This is a common policy in other coal exporting nations; the United States government should adopt the same policy.

Bilateral agreements, especially those which encourage research and development, and technology exchange are yet another method of boosting coal sales.

Diplomatic support of our coal industry is equally important and industry and government are working together in several ways to promote U.S. coal in overseas markets. The CEA just concluded a successful meeting in Korea cosponsored by the International Trade Administration (ITA), Department of Commerce and the Korean Institute of Energy Resources. We are now working with ITA to plan a series of meetings at embassies throughout the world. The purpose--to promote U.S. coal and the fact that the U.S. government supports our industry.

Finally, I would like to comment on the status of U.S. Japan coal trade and the implementation of the Reagan Nakasone Joint Policy Statement on Energy Cooperation which was initiated in

November, 1983.

This agreement called for increased cooperation between the U.S. and Japanese governments and our respective private industries to increase trade in oil, natural gas and coal. With respect to coal, the Joint Policy Statement was rather specific. It called for:

1. The possibility of concluding long-term contracts for met and steam coal to make American coal more competitive in the Japanese market;
2. The possibility of the joint development of mines to make American coal more competitive in the Japanese market;
3. The possibility of the joint development of transportation systems to make American coal more competitive in the Japanese market;
4. Japanese encouragement of utility and other industries to expand imports of more competitively priced U.S. steam coal;
5. Exploration of the possibility of increasing the substitution of coal for oil in electrical generation in

Japan;

6. The endeavor by both sides to maintain the level of Japanese imports of U.S. met coal and the exploration of the possibility of improving the competitiveness of and expanding trade in met coal in future years.

It is an understatement to say that implementation of this agreement has been disappointing.

Since Japanese Fiscal Year 1983, the year the agreement was signed, Japanese imports of U.S. metallurgical coal have fallen from 17 million short tons to FY 1985's 14.2 million will only be 10 million short tons this fiscal. The excuse that the Japanese economy and steel industries do not support an increase in U.S. imports is not a sufficient excuse for this sharp decline. Total Japanese imports of metallurgical coal have increased from 68.5 million tons to 78.7 million tons over the same period with the first sign of decline this year.

Imports of steam coal from the U.S. have not increased but have remained at one million tons per year despite an increase in Japanese purchases of steam coal from 16 million to 23 million tons. The Japanese have yet to agree on any long term commitments to purchase U.S. steam coal in years to come.

The U.S. coal exporting industry met with the Japanese private industry several times in the last two years under the auspices of the Joint Policy Statement. The charge of the U.S. Japan Standing Technical Committee on coal was to find a way to implement the agreement.

However, we were told repeatedly that the Japanese will not now nor do they intend to increase purchase of U.S. coal even if the coal is price competitive. Last winter, the industry concluded that there was no justification for further meetings on a private sector level and withdrew from the STC.

We have concluded that the only way that the Japanese will maintain the purchase of U.S. met coal or will increase the purchase of U.S. coal is through direct and continual public pressure on the part of the Administration. Semi-annual meetings of the U.S. Japan Energy Working Group held with no publicity, and the mention of coal during heads of state visits are not sufficient. The Administration must be firm and the agreement must be re negotiated to establish firm objectives for the future purchase of U.S. coal and to establish benchmarks against which progress can be measured. If this is not done, the Joint Policy Statement agreement for all practical purposes is worth nothing.

Mr. Chairman, we appreciate the opportunity to be here today. Despite the difficulties our industry has in meeting the

competition of today we are always optimistic about our future. Working together we believe that we can change that future. The time to start is now.

I will be pleased to answer your questions.

Senator HECHT. Mr. Thomas Altmeyer, please.

STATEMENT OF THOMAS ALTMAYER, VICE PRESIDENT, GOVERNMENT AFFAIRS, MINING AND RECLAMATION COUNCIL OF AMERICA [MARC]

Mr. ALTMAYER. Good morning, Mr. Chairman. MARC appreciates the Subcommittee's continuing interest in the importance of coal exports to the coal fields of the United States, the coal transportation and financing industries, and the United States trade balance. I would like to associate MARC and myself with the remarks of both Mr. McGlothlin and Mr. Moore, with whom we concur in their observations.

The Energy Information Agency projects world coal import demand to reach 455 million tons by 1995, up from 312 million tons in 1984. However, EIA projects the United States share of that market to decline from a current level of 26 percent to 22 percent over that period.

The major challenge facing the United States and United States coal exporters is to maintain that historical level of United States market share of approximately 25 percent and to expand that share.

The primary factor which impacts an importer's decision on where to buy coal is delivered price. The major components of the United States-delivered price of overseas shipments are the cost of mining coal, inland transportation and ocean transportation.

For the foreseeable future, ocean freight rates are not expected to be a significant factor. While importers consider a number of additional factors outlined in MARC's statement in sourcing coal, the primary emphasis to enhance the United States share of world coal trade must be placed on making United States coal more price competitive.

This spring, for example, ENEL, the Italian public utility company, issued a tender offer for 1 million tons of steam coal. Thirty bids were submitted for that 1 million ton requirement. The quoted price difference among the four lowest bidders, one Australian company, one United States company, two South African companies, was 50 cents per ton, CIF. Twelve additional United States producers were within \$5 a ton of the lowest bid.

The point of making this example is that the international market is highly competitive, and actions which reduce the cost of coal by 25 cents or 50 cents a ton, or actions that increase the cost of coal by 25 or 50 cents a ton, is going to make a difference on whether or not United States coal producers are competitive in the export market.

The coal industry cannot by itself take all the necessary steps to maintain and enhance its competitiveness. The coal industry must have tax policies which encourage investment for productivity improvements, modification or elimination of environmental standards which are unnecessary or not cost-effective, laws which promote transportation competition, and meaningful rate review in the absence of competition.

For its part, the coal industry, both management and labor, must continue to work together to identify and implement measures to

reduce the cost of mining coal and to increase productivity. The industry must continue to invest capital in new, more productive mines, and to invest in technologies for enhancing productivity at existing mines to be competitive.

In this regard, it is ironic that while the United States coal industry is facing increasing competition in both domestic and export markets, the Congress is considering tax reform legislation which would substantially increase the federal tax liability of the coal industry and radically reduce cash flows through reducing the depletion allowance for coal.

Should the proposed tax changes be enacted, which is likely, the industry's ability to generate capital, to finance investments for productivity improvements is going to be damaged.

Environmental regulation of coal production must be reviewed with an eye toward reducing compliance costs and affirmative action must be taken on this front. For example, in 1984, the National Academy of Scientists found that the total high wall elimination and approximate original contour requirements of the Surface Mining Act are not always necessary from environmental standpoint and can in fact be damaging. Yet, coal operators continue to expend substantial resources to completely backfill and eliminate high walls and return land to AOC.

Modification of these requirements, consistent with the National Academy Report, could save dollars per ton in the cost of mining coal in selected circumstances.

This example, and others in my submitted statement, are raised to emphasize the point that operators have little control over the significant environmental compliance costs imposed by law and regulation. A separate, undesirable side effect of many environmental standards which can have a significant negative impact on coal's competitiveness is to freeze technological development to the point of promulgation by incorporating design criteria, thereby restricting the ability of the coal industry to utilize technologies for productivity improvement.

Any effort to make United States coal more price competitive must include review and scrutiny from a cost-effective standpoint of existing and future environmental requirements.

Direct taxes as a percentage of the coal producers' cost range from approximately 10 to 37 percent of the selling price of coal. This cost is exclusive of environmental compliance costs and the 12.5 and 8 percent royalties required respectively on surface and underground mined coal.

Foreign producers are not faced with such specific liabilities as the Black Lung Tax, the Surface Mining Fee and Royalty Fees.

The Congress must recognize that increasing taxes and royalties directly impacts the competitiveness of coal and may, in aggregate, decrease the total tax and royalty revenues to the Federal Government through decreasing the tonnage sold in the markets that are available for United States coal.

Beyond costs, taxes and fees associated with producing coal, the most significant cost component of the delivered price of coal at the port is the inland transportation costs.

This cost component of the export chain, which can be as high as 70 percent, is essentially beyond the control of the coal exporter.

While the price of inland coal transportation for export has not increased significantly over the past several years, it has not decreased as has the price of coal in the face of increasing competition in world markets.

Rail transportation rates have not decreased, in spite of reduced costs to the railroads and greater operating efficiencies that have been achieved under the provisions of the Staggers Act, over the past several years.

The Consumer Rail Equity Act, and the Railroad Anti-Monopoly Legislation, both supported by MARC, are under consideration by this Congress. Enactment of these measures would enhance competition for coal movements and, in the absence of competition, ensure meaningful rate review by the ICC for captive shippers. They need to be enacted in this Congress.

Several other actions can be taken by the Federal Government to help expand coal exports.

The Government must expand and intensify its efforts to promote and expand United States coal. Foreign buyers, owned or directly controlled by their government, are influenced in their coal import decisions by their perception of the importance the United States Government places on coal as a component of its larger trade relationship.

The United States should continue its efforts to encourage countries which subsidize noneconomic coal mining industries, to phase them out and import coal to meet their requirements.

The United States should expand its limited bilateral, multilateral trade activities involving coal to all existing and potential importing countries. The Congress and Federal Agencies should explore linking foreign assistance with power generation development and include a commitment to use United States coal in new generating capacity.

The Export-Import Bank and other lending institutions, as discussed earlier, should closely scrutinize providing financial assistance for foreign projects which will develop new coal production capacity which will compete with the United States coal.

Other items for consideration by the Congress will be outlined in the Report of the Federal Coal Export Commission, which is planned to be completed this fall. However, because of time and budget constraints, it appears that the Report of the Federal Coal Export Commission will not provide any analytical support for its recommendations, but will primarily identify issues for evaluation by the Administration and the Congress.

Actions on any of these items individually, is not likely to guarantee and expand the share of the world coal trade for the United States. However, action on a number of these items as part of a systematic effort will expand the projected United States share of world coal trade and at least help prevent it from further eroding.

A combination of several items or actions that can reduce the price of United States coal by 50 cents to \$1 per ton, as reviewing the various environmental laws, will make a difference, as pointed out by the ENEL example, in whether or not the United States is able to be competitive in world markets.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Altmeyer follows:]

Statement
Mining and Reclamation Council of America (MARC)

Coal Export Hearings
Natural Resources Development and Production Subcommittee
Senate Energy and Natural Resources Committee
August 5, 1986

Chairman Warner, members of the Subcommittee, I am Thomas Altmeyer, Vice President-Government Affairs, of the Mining and Reclamation Council of America (MARC). MARC is a national association of coal producers and ancillary industries from all coal producing regions of the United States. MARC appreciates the Subcommittee's continuing interest in the importance of coal exports to the coal fields of the United States, the coal transportation and financing industries, and U.S. trade policy. Last year, the U.S. exported 92 million tons of coal, 10% of production, with an export value of \$4.5 billion. With the exception of some agricultural products, coal is the most important bulk commodity export of the U.S.

MARC members participate in coal export sales as either direct sellers or in providing coal for contracts secured by brokers or other companies. MARC is interested in pursuing expanded markets for U.S. coal as a means to create additional market opportunities in both international and domestic markets.

Toward this end, MARC's Exporters Section members work individually, with government agencies as the Departments of Commerce, Energy and State and in cooperation with other interested coal groups as the Coal Exporters Association, the Mississippi Valley Coal Exporters Association, the Western Coal Exporters Council, and the Anthracite Industries Association. Among other activities over the past several years, MARC has actively participated in government sponsored trade missions to Europe and the Pacific Rim markets; the Japan-U.S. Standing Technical Committee on Coal Trade established under the Reagan-Nakasone Energy Accord of November, 1983; and is currently working as a member of the Federal Coal Export Commission.

Although the projections for expanded U.S. coal exports are not nearly as optimistic as the early 1980's when exports reached a record high of 112 million tons in 1981, world coal trade is projected to steadily increase over the remainder of the century. In major coal importing regions - the Pacific Rim is projected to increase imports at a 8% annual rate and the European market is projected to grow at 4%. The Energy Information Agency (EIA) projects world coal import demand to reach 455 million tons by 1995, up from 312 million tons in 1984, however EIA projects the U.S. share of that market to decline from 26% to 22% over that period. The major challenge is, at a minimum, to maintain the historical U.S. market share of world coal trade of approximately 25% and to expand that share.

Historically the U.S. has played a significant role in world coal trade because of its high grade metallurgical coal. Demand for metallurgical coal in the world market, however, is not projected to increase. As a consequence, the future growth in U.S. coal trade will depend on the U.S. position in the highly competitive world steam coal market. Currently, the U.S. coal industry is considered a "swing" supplier in that market because of its higher delivered price vis-a-vis other major coal exporting countries.

While there are a number of factors which impact an importer's decision on where to buy coal, the primary factor is delivered price. The major components of the U.S. delivered price of overseas shipments are the cost of mining coal, inland transportation, and ocean transportation. For the foreseeable future, ocean freight rates are not expected to be a significant factor. Coal producers, within a parameters of laws, taxes, and fees applicable to mining coal, control the cost of getting coal out of the ground and loaded for transport. Transportation companies, primarily railroads and to a lesser degree barge operators, control the cost of moving coal to the port.

Beyond the delivered price of coal, foreign importers consider several other factors in determining where to buy coal. Among those factors are:

- (1) Security of supply;

- (2) Reliability and productivity of mine labor and the related workforce in export infrastructure industries;
- (3) Capability to consistently meet quality requirements;
- (4) Government involvement; and
- (5) Relative costs and profit margins of the components of the coal export chain.

While the U.S. coal industry scores well on the first three of these factors, it is often disadvantaged vis-a-vis producers in other major exporting countries on the latter two. The U.S. government, while it has increased its profile on coal exports significantly over the past several years, is not regarded as placing as much relative emphasis on coal in its trade discussions as other major exporting nations. Government support of either the production or transportation components of the export chain in several of the other major coal exporting countries puts the U.S. coal export chain, which is privately owned, at a disadvantage on the fifth factor.

With this background, the question is what can be done to enhance the U.S. share of world coal trade. The primary emphasis, as noted above, must be placed on making U.S. coal more price competitive.

The coal industry cannot, by itself, take all the necessary steps to maintain and enhance its competitiveness, the coal industry must have: tax policies which encourage investment for productivity improvements; modification or elimination of environmental standards which are unnecessary or not cost effective; and laws which promote transportation competition and meaningful rate review in the absence of competition.

Investment and Productivity

For its part, the coal industry -- both management and labor -- must continue to work together to identify and implement measures to reduce the cost of mining coal and to increase productivity. Unnecessary work rules and practices must be eliminated and efforts must be continued to reduce health care costs. Industry must continue to invest capital in new, more productive mines -- and to invest in technologies for enhancing productivity at existing mines.

Remarkable progress has been made by management and labor over the past several years. In spite of an increase in production costs of over 100 percent from 1974 to 1984, in constant dollars the national average minemouth price of coal has declined by 18 percent over the same period. The coal

industry has survived this shrinking margin between costs and prices by making investments to increase productivity. Over the past seven years, production per man-hour has increased 175% in underground mines and 145% at surface mines. While this is an impressive record, further improvements must continue to be made.

Tax Policy

In this regard, it's ironic that just when the U.S. coal industry is facing increasing competition in both domestic and export markets, the Congress is considering "tax reform" legislation which would substantially increase the federal tax liability of the coal industry and restrict cash flow through reducing the depletion allowance. Should the proposed tax changes be enacted, the industry's ability to generate capital to finance investments for productivity improvements will be seriously damaged.

Environmental Standards

Environmental regulation of coal production must be reviewed with an eye toward reducing compliance costs. For example, EPA is currently reviewing comments on its proposal to regulate fugitive dust from surface mines. In

spite of the fact that surface coal mining is responsible for less than 1 percent of all fugitive dust generated annually in the U.S., EPA has singled out surface coal mining for regulation although no adverse health effects exist and only minimal welfare effects, soiling in areas of close proximity have been demonstrated. Should this rule be implemented, the only available viable technology for compliance will be to downsize mines by factors ranging from 4 to 30. Such reductions in economies of scale of existing mines and similar restrictions on new mines will exacerbate the non-competitiveness of U.S. coal with no discernible benefit to the environment.

A 1984 report by the National Academy of Science (NAS) found that total highwall elimination and approximate original contour requirements of the Surface Mining Act are not always necessary from an environmental standpoint and can, in fact, be damaging. Yet coal operators in Appalachia continue to expend substantial resources to completely backfill and eliminate highwalls and to return land to AOC. Modification of these requirements, consistent with the NAS report, could save several dollars per ton in the cost of mining coal in selected circumstances.

These examples are raised to emphasize the point that operators have little control over the significant environmental compliance costs imposed by

law and regulation. A separate undesirable side-effect of many environmental standards is to freeze technological development at the point of promulgation by incorporating "design criteria" thereby restricting the ability of the coal industry to utilize new technologies for productivity improvement.

The effort to make U.S. coal more price competitive must include review and scrutiny from a cost effectiveness standpoint of existing and future environmental requirements.

Coal Specific Taxes and Fees

Every U.S. coal operator must currently pay the black lung tax and a surface mining fee for each ton produced. The combined cost of these charges is \$1.25/ton for underground coal and \$.90/ton for surface mined coal. In addition to these coal specific federal taxes the industry pays FICA, unemployment, severance, and federal and state income taxes and indirect taxes as the federal fuel and tire taxes. Direct taxes as a percentage of the coal producer's cost range from approximately 10% to 37% of the selling price of coal. This cost is exclusive of environmental compliance costs and the 12.5% and 8.0% royalties required respectively paid on surface and underground mined federal coal. Foreign producers are generally not faced with such specific

liabilities as the black lung tax, the surface mining fee, and royalty fees. The Congress must recognize that increasing taxes and royalties directly impacts the competitiveness of coal and may, in aggregate, decrease the total revenues to the Federal government through decreasing the tonnage sold.

Transportation

Beyond the costs, taxes, and fees associated with producing coal, the most significant cost component of the delivered price of coal at the port is transportation cost. This cost component of the export chain, which can be as high as 70%, is essentially beyond the control of the coal exporter. While the cost of inland coal transportation coal for export has not increased significantly over the past several years, it has not decreased, as has the cost of coal in the face of increasing competition in world markets.

Legislation, the Consumer Rail Equity Act and "railroad anti-monopoly" legislation, supported by MARC, is under consideration in both the Senate and House. The C.U.R.E. legislation, cosponsored by several members of the Committee, would, in part - provide logical market dominance and revenue adequacy tests; restrict the exemption authority of the ICC; provide meaningful rate review; and direct the ICC to consider the impact of rate

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levels on traditional markets for transported commodities. The anti-monopoly legislation, as modified, would eliminate the railroads antitrust immunity and establish a private cause of action under applicable law. Enactment of these measures would enhance competition for coal movements and, in the absence of competition, assure meaningful rate review by the ICC for captive shippers.

As a result of recent competition in the Southern Powder River Basin of Wyoming, rates for shippers have decreased as much as \$7 a ton. The industry is hopeful that proportionate reductions will occur in other areas as an outgrowth of Congressional action on rail legislation.

Ideally, coal producers and railroads will work together to reduce transportation costs to enhance competitiveness. Existing law promotes contracts. This provision, enacted in the Staggers Act, provides an opportunity for joint interest cooperation. It is imperative for coal shippers and railroads to avail themselves of this mechanism to make U.S. coal more competitive in selected markets. If they don't, both may end up losers.

Other Recommended Actions

- The government must expand and intensify its efforts to promote and expand U.S. coal. Foreign buyers are often owned or directly controlled by their governments. As such, those governments, which often consider

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coal to be a component of their larger trade relationship with the U.S., are influenced in their coal import decisions by their perception of the importance the U.S. government places on the export of its coal.

- The U.S. should continue its efforts to encourage countries which subsidize non-economic coal mining industries to phase them out and import coal to meet their needs. Japan has recently indicated that it may evaluate such action and France continues to reduce its production capacity.
- The U.S. should expand its limited bilateral and multilateral trade activities involving coal to all existing and potential importing countries.
- The Congress and the federal agencies should explore linking foreign assistance with power generation development and include a commitment to use U.S. coal in new generating capacity constructed with U.S. financial assistance.
- The Export-Import Bank and other lending institutions should closely scrutinize providing financial assistance for foreign projects which will develop new coal production capacity which will compete with U.S. coal.

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Other items for action, both for the coal export chain participants and government will hopefully be identified in the final report of Federal Coal Export Commission (FCEC) which is tentatively planning to complete its work this Fall. However, because of time and budget constraints, it appears the FCEC report will not provide analytical support for its recommendations but will primarily identify issues for evaluation by the Administration and the Congress.

Action on any of these items individually will not guarantee an expanded share of world coal trade for the U.S. However, action on a number of them as a part of a systematic effort will expand the projected U.S. share of world coal trade and, at least, help to prevent it from further eroding.

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Senator HECHT. Thank you, very much. I wanted to state that Senator Johnston has a statement for the record.

[The prepared statement of Senator Johnston follows:]

OVERSIGHT HEARING - THE PROSPECTS FOR EXPORTING AMERICAN COAL

Statement of Senator J. Bennett Johnston

The prospects for exporting American coal is a subject worthy of our careful attention. The United States, historically the leader in coal exports, was surpassed by Australia in 1984, in exporting coal. The factors contributing to the erosion of the U.S. market position are many, but prominent among them is the high cost of transporting coal.

According to the Energy Information Administration (EIA), internal transportation represents a "significant portion" of the delivered costs of U.S. coal to domestic and foreign markets and thus "directly impacts" the competitive position of U.S. coal. For example, based on information provided by the EIA, transportation costs of coal delivered to California are 58 percent of the total delivered costs for Wyoming coal, and transportation costs of coal delivered to the port at Mobile, Alabama are approximately 40 percent of the total delivered costs for Kentucky coal.

For several years I have been a strong advocate of legislation to grant federal eminent domain authority for coal slurry pipelines. I view coal slurry pipelines as an important element in solving the transportation cost issue, and will continue in my efforts to secure passage of this important legislation.

Finally, our efforts to maintain and improve the competitiveness of U.S. coal must be made in an environmentally acceptable manner. We must maintain our own domestic safety and environmental standards for producing coal. Furthermore, through innovative approaches such as the Clean Coal Technology Program, I am confident that we can promote coal use in other nations and thus increase exports of both U.S. technology and U.S. coal.

Senator HECHT. I have a question for the panel: What is the likely impact of the currently reduced price for oil on the market for United States coal in export markets?

Mr. MCGLOTHLIN. As an exporter of coal, United Coal has already lost some of its market share in Europe because of the reduction in oil prices. If they stay at this level, or decline further, we expect to lose even further market share. Both on the export market, and I might add that in the Northeastern part of this country, we have lost domestic business because of imported oil.

Senator HECHT. You mention in your statement about China and their coal; what impact will that have?

Mr. MCGLOTHLIN. Of course, China is located so closely to the Pacific rim countries we now export to—principally Japan, Taiwan, and Korea—expect to lose a great deal of our market share to the Chinese coal, which is a joint venture of the Chinese Government and Occidental Petroleum, and as we heard just before you came in, Mr. Chairman, supported somewhat by the Eximbank's loan to that venture.

Senator HECHT. I will have to go back in the record and research that. I am very interested in that.

Do you anticipate that the Federal Coal Export Commission will provide concrete recommendations for expanding the sale of United States coal in foreign markets?

Mr. ALTMAYER. Our hope and expectation would be that it would be that it would provide concrete recommendations. However, because of the extremely tight timeframe that the Federal Coal Export Commission is operating under, and the lack of resources available, both in financial support and staff support to the Commission, I think the effort of the Commission will really be just to spot issues that need further development by the agencies of the Federal Government or by the Congress.

We don't anticipate that it will provide any analytical support or substantive support for recommendations which it makes.

Senator HECHT. In approving legislation to revamp the trade laws of the United States, the House of Representatives has included a direction to the Special Trade Representative, renegotiate the allocation of the voluntary restraint agreement on steel, to specifically link it to this level of import of U. S. metallurgical coal. Do you support this direction and, to your knowledge, is it responsive to pressures you feel in the marketplace?

Mr. MOORE. Yes, we strongly support it. The National Coal Association and the Coal Exporters would strongly support those being renegotiated and we think it will be beneficial. Some of the countries, like Brazil and Korea, would very much like to import more United States coal, but they would like as a tradeoff to be able to export more steel to the United States.

Senator HECHT. Over the 6 to 12 months, the value of the United States dollar has declined with respect to the Japanese yen, the German mark and other currencies. Has this decline in the value of the dollar enhanced the exports of dollar-denominated U.S. coal?

Mr. MOORE. Really not so much. One of the factors is that coal is all priced in dollars, just like oil is, so it hasn't had any effect. If you looked during this period of time, the ratio of one of our major

competitors, between the United States dollar and the Australian dollar, has not changed significantly.

Mr. ALTMAYER. I would like to make an additional point with respect to that issue, Mr. Chairman. There is a popular conception that a decrease in the value of the dollar is going to increase the amount of U.S. exports. That does not hold true for the coal industry.

The Australian dollar and the South African rand have decreased at about the same rate as the United States dollar. As a consequence, with respect to primary export markets, the reduction in the value of the dollar has not enhanced our ability to export to those markets by making the United States more competitive, versus Australian coal or South African coal because those currencies have had corresponding decreases.

Senator HECHT. Since you brought that you, being on the Banking Committee, I have to ask you another question: Has that been a failure?

Mr. ALTMAYER. With respect to the coal industry, it has not been successful. With respect to other industries, I am not in a position to comment.

Senator HECHT. You are not at all in favor of the so-called Baker Plan on that?

Mr. ALTMAYER. I am really not in a position to comment on the Baker Plan. The point that I was seeking to make is, to the degree that there is a perception that the decrease in the value of the dollar is going to help all U.S. export industries, that is not accurate with respect to the coal industry because the dollar has decreased at the same rate as the Australian dollar and the South African rand.

With respect to other industries, I am sure that the effort to decrease the value of the dollar has resulted in increased export opportunities.

Senator HECHT. I think it is well that you brought that up for the record because this is one of the hot topics in international finance right now, devaluing the dollar for export.

Any other of the panel have anything to say before we call the next panel up?

[No response.]

Senator HECHT. Thank you, very much.

Mr. William Dempsey, Mr. Michael Buckner, and Mr. Yoo.

We have Mr. Stanley Payne's testimony and it will be submitted for the record.

[The prepared statement of Mr. Payne follows:]

STATEMENT OF

J. STANLEY PAYNE, JR.
EXECUTIVE ASSISTANT AND GENERAL COUNSEL
VIRGINIA PORT AUTHORITY, COMMONWEALTH OF VIRGINIA

COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT AND PRODUCTION

AUGUST 5, 1986

Mr. Chairman,

I would like to thank you for this opportunity to speak on the state of American coal export. Representing a state that is both a substantial coal producer and location of the world's largest coal port, I can attest to the importance of your efforts to the Commonwealth of Virginia.

Let me say at the start that much of this statement results from my discussions with the 'true' coal export experts in Hampton Roads, those agents and terminal operators whose businesses must endure the swings of the coal export market - Wilson Browning has been especially - informative. It was Wilson Browning, a leading coal export agent, who recently described the state of coal export in this way:

"It is its usual precarious self, with a host of predators lurking around that won't go away."

The U.S. coal export is best described as 'flat', and will remain flat without dramatic economic change or political upheaval or both. Several factors have contributed to this:

1. A decrease in the value of the U.S. dollar against other currencies, which should have helped spur exports, has not done so because the currencies of our two primary competitors in the world coal market, South Africa and Australia, have declined dramatically as well.
2. Australia has virtually no domestic market for its coal and has no alternative to offering its coal on world market at bargain basement rates.

3. A new competitor, Colombia, is a growing factor in the export market, with good quality steam coal now being tested in the U.S. domestic market - one U.S. industry executive made the comment "thank God it won't coke", referring to the fact that our somewhat exclusive metallurgical coal markets abroad would then be threatened if the Colombian coal could be used in steelmaking.
4. It has been suggested that other than its high quality and security of supply, American coal remains marketable mainly through the recognition by foreign coal buyers that U.S. participation in foreign markets serves as obstacle to possible development of an OPEC-like coal cartel among other coal suppliers. This is not enough to trigger great growth in markets for U.S. coal or even protect existing markets.

We are left with basically a flat demand for U.S. coal that will remain so until there is fundamental growth of the world's economy, as even small world economic growth translates into demand for massive additional amounts of coal, or there is upheaval among our competition, which, given the political and labor climates of some of our competitors, is certainly possible.

Two ways have been suggested as active steps to help strengthen U.S. coal markets abroad. First, Australia has recently been successful in obtaining contracts to build power plants and generate electricity in foreign countries in turnkey contracts, creating a stable source of

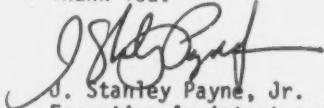
demand for Australian coal. U.S. coal arrangements loses out from lack of coordination among government, coal, and construction interests and from lack of willingness by U.S. companies in assuming the great financial burden and risk in developing preliminary pre-engineering plans and bids. Minimizing such great risk may be a fruitful role for our federal government.

A second way is to reduce the delivered cost of U.S. coal abroad. One means to do this is the deepening of our nation's harbors, allowing larger ships to fill to capacity and reap the benefits of economies of scale. I am proud to report that the Virginia Port Authority and Commonwealth of Virginia recently signed the first agreement with the U.S. government to share the cost of harbor deepening at a major port. Virginia has recognized the need for a positive step toward protecting our markets and developing potential markets abroad and boldly acted at recognition. \$26 million dollars has been appropriated for Virginia's share of this important project, \$26 million dollars that sits due to the inability of Congress to enact water resources legislation. Local Sponsors were told to put up or shut up if their harbors needed deepening - Virginia decided to put up. Now its time for the Federal Government, through Congress, to do the same. A new momentum toward enacting this legislation would be a fitting, fruitful and much needed result of this hearing. I might add also that private enterprise in Virginia has worked to increase the marketability of our coal by building two state-of-the-art ground storage facilities in Hampton Roads, to add to the world's fastest largest coal pier already present.

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In closing, I would state that some positive steps are being taken for U.S. coal export, and opportunities exist for further creative steps. These steps need to be taken, for if not, there are a 'host of predators lurking around that won't go away'.

Thank You.

A handwritten signature in dark ink, appearing to read "J. Stanley Payne, Jr.", with a stylized, flowing script.

J. Stanley Payne, Jr.
Executive Assistant and
General Counsel
Virginia Port Authority
Commonwealth of Virginia

Senator HECHT. Mr. Dempsey, would you start off, please?

STATEMENT OF WILLIAM H. DEMPSEY, PRESIDENT, ASSOCIATION OF AMERICAN RAILROADS; ACCOMPANIED BY: RENEE RYSDAHL, CSX TRANSPORTATION

Mr. DEMPSEY. Thank you, Mr. Chairman. I know that your time is short and I will be brief. I am accompanied by Mr. William Bales, who is Vice President for Coal and Ore Traffic of the Norfolk Southern Corp., and Ms. Renee Rysdahl, who is the assistant to the President of CSX. These are the two largest railroads in respect to coal transportation and they will be able to answer questions that I expect I would not be able to answer.

We have written statements that we have submitted for the record.

Senator HECHT. It will be part of the record.

Mr. DEMPSEY. And I won't even try to summarize my statement. I have listened to the previous witnesses and I think what I would like to do would be to identify from a railroad perspective the principle issues that seem to me to have been raised and make a few brief comments on them.

In the first place, what is the interest of the railroads in export coal? Well, obviously, it is enormous. Coal is our number one commodity across the industry and we must necessarily act in partnership with the coal industry in respect of promoting the exportation of coal because it is at the heart of our economic welfare.

What is the key problem that we see in respect of the declining U.S. share of the export market? Clearly, all the witnesses have agreed that it is price competition. The U.S. coal is of high quality; the reliability is high, but our prices are high in comparison with the prices of our major competitors.

Well, what are the reasons? Well, obviously from the witnesses you have heard they are multiple. We have the value of the dollar that you have just been discussing, we have foreign subsidies, we have the cost of coal production, we have the cost of rail transportation and on, and on, and on.

In that connection, as a footnote, but an important one, I would like to underscore what one of the previous witnesses has said. We don't subsidize coal in the United States as other countries do, and we don't subsidize rail transportation, but the Congress now has before it a tax bill that would have perhaps, if the Senate version is departed from in a significant way in favor of the House version on capital investment incentives, a bill that I can sit here and predict with absolute confidence would have a serious disadvantageous affect on coal exports.

It would hit the coal industry and it would hit the rail industry as capital intensive industries very hard, indeed.

That would be going in exactly the opposite direction I think that what the interest of this Committee is.

Of course, the cost of rail transportation is important; how important is it? Well, sometimes fingers are pointed at the rail industry as being a principal culprit. I think that some perspective on this can be gained if you look at the recent Department of Energy study that concluded that if—if—export coal from western Appa-

lachia had been transported by the railroads free of charge, and there had been no port charges at all, that still the price of the United States coal would have been higher in Western Europe than the price of South African and Australian coal and higher than the price in Japan of Australian coal.

So while the cost of rail transportation is certainly important, it is not the key element in this very complicated equation.

What has happened since Staggers, and I raise that question because one of the witnesses referred to it—as I say, we have a partnership here. We are locked together in self-interest with the coal industry, and accordingly, it is not to our advantage to price American coal out of the export market.

Since Staggers, what has happened has been that export coal, rail transportation rates have either remained the same or they have gone down. Where they have remained the same, of course, they have gone down in real dollar terms because of the impact of inflation.

So that I think that evidences that the railroads have been trying to do their share in maintaining the competitiveness of the U.S. coal and the rail export market. The witness said, well, rail rates haven't gone down since Staggers. I wouldn't think that would be terribly surprising because at the time that Staggers was enacted, the rail industry was in bankruptcy in the Northeast, and the East, in general, and in the Middle West, and the notion that Staggers would have led to a major reduction in rail rates seems to me not to have been anything that anyone would have contemplated at that time.

Now, what can we do on our side of it? We can do our best to trim our costs, just as the coal industry must do, and we are trying to do our best to do that. We can enter into contracts. About 70 percent of our export coal moves under contracts now, which indicates the coal mines, the coal shippers and the railroads have arrived at mutually satisfactory agreements as to what the rates ought to be and what the service ought to be. But we need to press ahead on that front and we are—and I have all kinds of examples in my testimony about the kinds of capital investments that we are making in the industry.

Rail labor must play its part, just as the coal industry's labor unions must play their part.

Finally, my last remark is simply this, and that is that perhaps there should be some sort of subsidy to export coal. I don't speak to that one way or the other. That is a matter of public policy for this committee and the Congress to decide. But that subsidy should not come from the rail industry. That is my concluding point.

Staggers was meant to wipe out all of that business that we have had for decades, in which the rail industry was called upon to subsidize the coal industry, or the agricultural shippers, or the small elevator operators, or the ports, or whatever.

That policy of using the rail industry as an instrument of social and economic policy brought the industry to its knees. Staggers was designed to wipe all that out, and so if there is an argument, and there may well be, for some sort of public support for the coal industry and coal exports, it should not be at the expense of the

railroads. It should be identified as a public benefit to that industry.

Thank you, very much, Mr. Chairman.

[The prepared statement of Mr. Dempsey follows:]

STATEMENT OF WILLIAM H. DEMPSEY
PRESIDENT OF THE ASSOCIATION OF AMERICAN RAILROADS
BEFORE THE SENATE
SUBCOMMITTEE ON NATURAL RESOURCES
DEVELOPMENT AND PRODUCTION,
COMMITTEE ON ENERGY AND NATURAL RESOURCES

August 5, 1986

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to appear before you to assist in your consideration of U.S. coal exports and to provide the railroad industry's perspective on this important matter.

Today, we find ourselves in an era of ever increasing economic competition from abroad, where balance of trade has become an issue of paramount importance. As such the factors affecting the export of one of our nation's most plentiful resources do indeed deserve thorough consideration. However, in the course of any examination of the U.S. role in the world coal market we must resist the temptation to look for easy answers or handy culprits. Rather, we must carefully explore all relevant factors, determine which are most susceptible to positive change, and work together toward achieving those changes.

Coal truly is one of our nation's most plentiful resources. In 1985 the United States produced 886 million tons of coal. This figure represents an increase of more than 200 million tons over 1975 and accounts for approximately 20 percent of the world coal production. Coal is mined in 26 states covering various regions of our nation. It is estimated that the United States possesses the world's largest coal resources. Clearly the potential

exists for our continuance as a leader in supplying the world with coal, in addition to more than satisfying our domestic needs.

Nearly 90 percent of the coal produced in the United States is consumed domestically (80 percent of that amount is used in the generation of electricity, with other significant users being residential and commercial consumers, coke plants and industry). Nonetheless, in 1985 the U.S. exported 92 million tons of coal with an estimated value of nearly four and one half billion dollars to 61 foreign nations. The chief importers of U.S. coal have been Western Europe, nations on the Pacific rim and Canada. Economic developments and the fortunes of the steel industry in these nations will, of course, affect their future demand for coal. Economic growth in other parts of the world can open new markets.

Along with the United States the chief coal exporting nations include Australia, South Africa, Poland, Canada, Colombia, the U.S.S.R. and the People's Republic of China. In addition to price, other factors that affect a nation's attractiveness as an international coal supplier are the quality of its coal and its reliability as a supplier. Although the United States receives high marks in the latter two categories, it has had difficulty competing with other exporting nations on the basis of price.

Worldwide demand for coal has been on the increase. In the decade following the oil embargo of 1973 international coal trade rose from 191 million tons to 328 million tons, and by 1995 it is

expected to increase to 455 million tons. However the U.S. share in both the European and Asian markets has been declining. Though the U.S. remains the leading supplier of coal to Western Europe, both South Africa and Australia have been increasing their shares in that region. In Asia, where Australia is the largest supplier and the People's Republic of China a new entrant, the U.S. has seen its market share decline as well. And, in 1984 the U.S. was surpassed--for the first time--by Australia as the world's leading coal exporter.

Europe's coal imports (though not necessarily its share of the world trade) are expected to increase significantly over the next decade. Likewise, Asian imports (principally to Japan, South Korea, Hong Kong and Taiwan) are projected to grow. Canada, despite being a major producer of coal, is also a large importer. This is because most of its coal is produced in the western part of the country while most consumption occurs in the east, and it is more economical for the Canadians to use coal from the eastern United States than to transport it from its own western regions. While the U.S. has been and should remain the primary supplier of coal to Canada, the Canadian market is not projected to expand a great deal. Finally, South America--specifically Argentina, Brazil, Chile and Mexico--has become an importer of some significance with a potential for future growth.

In sum, with an expanding world market, the potential for the United States to increase its coal exports is there. However,

the competition--not just from Australia, Poland and South Africa, but also from Canada, Colombia and China--is likely to be vigorous.

The railroad industry plays a significant role in the marketing of U.S. coal . Over 60 percent of the coal shipped in the United States moves by rail. (Rail is even more dominant in the Central Appalachian region which historically has been the nation's leading coal exporting region.) Conversely, coal is the leading commodity shipped by the railroads, accounting for 40 percent of rail tonnage in 1985. It is clear that the rail and coal industries rely on each other a great deal. Certainly it is in the interest of our nation's railroads to do all they can to facilitate the competitiveness of coal, both domestically and abroad. To do otherwise would make little economic sense.

The basic problem confronting U.S. coal in the export market is that its delivered price to many importers is higher than that of the coal available from competing exporters. In some quarters of the coal industry, it has been popular to point the finger at the railroads and claim that U.S. coal would be competitive if rail rates were not so high. The fallacy in that claim is clear from a report by the Department of Energy, entitled "Annual Prospects for World Coal Trade 1985," which shows that even if U.S. rail and port charges were reduced to zero the cost of South African coal in Europe and Asia, and Australian coal in Asia, would be less than the delivered price of deep mined coal from Appalachia. Obviously, rail rates are not the principal culprit and

to focus blame on rail rates for the basic inability of U.S. coal to compete abroad can only divert attention from other factors which do affect our competitiveness in the international coal market.

The most significant factor hindering all U.S. exports in recent years is the high value of the U.S. dollar which has made our goods more expensive overseas. An unfavorable exchange rate can have a negative impact on exports even if the cost of production is reduced at home. Since 1980 the value of the dollar has increased relative to the currencies of Italy, France, Belgium and the Netherlands, all major European importers.^{1/} In the past year the value of the dollar has begun to decline in these countries. Overall however, the exchange rates of the Australian dollar and South African rand remain more favorable, resulting in a relatively lower price of Australian and South African coal in Europe.

While overall the value of the dollar has declined in Japan--the world's leading coal importer--over the past six years, the values of the Australian and South African currencies have declined even more in that period, once again making their coal less expensive in the Japanese market.^{2/} Therefore, while the recent decline in the value of the U.S. dollar overseas is cause for some

^{1/} Between 1980 and 1985, the value of the dollar increased 123 percent against the Italian lira and 113 percent against the French franc--in effect doubling the price of U.S. coal.

^{2/} The yen increased in value 55 percent over the Australian dollar, 47 percent over the Canadian dollar, and 168 percent over the South African rand, but decreased 5 percent in value with the U.S. dollar.

optimism with respect to our export trade, in assessing the impact of that decline we must be mindful of the relative value of the currency of other major coal exporters. If exchange rates also keep the price of our competitor's coal down, U.S. coal exporters will have to look beyond exchange rates to gain a competitive advantage.

Another factor affecting the competitiveness of U.S. coal is its high cost of production relative to many other exporting countries. Several factors account for this. First, our labor costs are high. Though it is a fact of life that wage rates in the United States are and probably will remain higher than in other coal exporting countries, the coal industry must make sure that, at the very least, productivity keeps pace with any increases in labor costs.

Another factor that affects the price of U.S. coal is the cost of compliance with various health, safety and environmental regulatory requirements. It is commendable that despite their costs we maintain high standards in these areas, and no one is suggesting that they be jettisoned. However, it is important that such regulation be done cost effectively. To the extent that regulation of mine operations can be modified to achieve its goals in a more cost effective manner, U.S. coal will be more competitive in world markets.

The cost of capital is a third factor affecting U.S. coal production costs. In many other countries the government subsidizes

the cost of investment or promotes the coal industry in some other manner. This is generally not the case in the United States. However, as a recent report on the status of U.S. coal exports prepared for the Department of Commerce notes, our tax laws can have a marked affect, either positive or negative, on capital investment. The report suggests that the affect of tax policy on the ability of the coal industry to compete in international markets be given consideration, and is less than sanguine about the potential impact that pending tax legislation will have on firms in the coal export chain.

Worldwide, ocean rates are also a component in the price of coal. Presently, due to an oversupply in the world's dry bulk carrier fleet, the rate differential between large and small ships is minimal. At the moment, this works to the advantage of U.S. exporters who are unable to fully load the larger vessels because of the lack of deepwater ports in this country. If this oversupply is reduced in the future, it could have a detrimental impact on U.S. exports.

Currently the Norfolk Southern Corporation is involved in a controversy over its proposed topping-off operations in the Delaware Bay. Topping-off involves partially loading deep water vessels at port and then steaming them to a mooring site where the loading can be completed from barges. The State of Delaware has opposed this operation on environmental grounds. If the bulk freight shipping market tightens up it will become more important for U.S. exporters

to have the ability to fully load larger vessels, and topping-off operations will become an attractive economic option which should be given consideration. The alternative--the deepening of ports--is costly and time consuming.

There are some factors affecting coal exports over which we have little control. One is the declining world price of oil. If this trend continues the demand for coal may decrease as oil becomes a cheaper source of energy. On the other hand, reduced oil prices could spur increased economic growth throughout the world and, with it, greater demand for coal. At this time the future of world oil prices and their effect on coal imports remains to be seen although short term prices for oil are now competitive with coal in some European markets.

Because the railroads are a major player in the marketing of coal, rail coal rates have often--and unjustly--been the whipping boy for the decreasing competitiveness of U.S. coal in world markets.^{3/} The fact of the matter is that despite inflation, few export rates have increased at all in the last few years and many have been lowered. Consequently, they have decreased in constant dollars. Moreover, it is estimated that about 70 percent of the

^{3/} In the last three years domestic coal rates have increased a total of only 4 percent. In terms of constant dollars they have increased only 2.1 percent since October 1, 1980, the effective date of the Staggers Act. In terms of revenue per ton-mile, at \$2.50 coal ranked seventeenth out of nineteen commodities in 1984. It is obvious that the railroads have not abused any market power they might have in the transportation of coal.

export coal moving by rail now moves under contract --so most rates are now negotiated like all other prices in the export coal chain.

The railroads, like the producers, realize that merely holding the reins on prices may not be enough to keep U.S. coal competitive in international markets, and they are constantly seeking ways to reduce transportation costs. One example of how the coal hauling railroads have undertaken to improve efficiency is the industry-wide trend toward moving coal in trainload lots from one origin. The CSX railroads (the Chessie and Seaboard Systems), which are the leading haulers of coal among the railroads, have set their sights on moving half their coal in unit trains. Moving coal in this manner is more efficient as it avoids switching and yard classification costs. The savings realized through these operations can be passed on to the coal shippers.

To further enhance efficiency, railroads have made large investments in new equipment and facilities. In the last ten years the industry has spent nearly \$25 billion on coal-hauling equipment, a significant percent of overall capital outlays. New lighter hopper cars, which are capable of carrying more coal than the older versions, have recently been purchased in large quantities. Most east coast railroads have made major improvements to port facilities and expanded port capacity in order to enhance the efficiency of their operations.

But there are limits to the extent which productivity can

be increased by capital expenditures alone. Rail labor must also make a contribution. Labor contract provisions which are not in tune with modern operating capabilities and which create barriers to increased productivity must be changed. In the long run, labor can only gain through the expanded demand for rail service made possible by the lower costs accompanying increased productivity.

Another means by which rail costs can be reduced is through contracts. The certainty contracts provide, particularly if long term, leads to increased efficiency in all aspects of rail service through better planning. These efficiencies--such as in the purchase and utilization of equipment--are directly reflected in reduced costs which can be passed along. For this reason, the contracting option now available to railroads has been aggressively pursued. Working together with others in the export chain, we think greater economies can be achieved if longer term commitments can be developed.

In addition to efforts aimed directly at reducing the cost of transporting coal, the railroad industry, mindful of the fact that transportation is a highly competitive field, is looking for ways to reduce costs in general. The High Productivity Integral Train (HPIT) project is an innovative effort whose goal is just that. Under the HPIT project the industry is studying new train concepts designed to greatly reduce rail transportation costs. Some of the innovations proposed to date are in the bulk commodity area. Though right now they represent only a potential, that potential

holds promise ultimately for significant reductions in the cost of transporting coal and many other commodities.

In summary, while the railroads are doing a good deal to enhance our country's competitive position in the international coal market, they are committed to doing more. The forecasts for future U.S. coal exports are not as bright as they should be. Our task is to prove the forecasts wrong. In recent months there has been greater cooperation between the coal interests and the railroads. This is a good sign. I believe that by continuing to work together, the railroads, the coal producers, the ports, and everyone else in the export chain, can accomplish that task.

This completes my prepared remarks. I shall be happy to answer any questions the Subcommittee may have.

Senator HECHT. Thank you. I was just handed this which I do not think you will mind if I read, from a press release.

Our railroads are transporting boxcars of hay to feed livestock in drought-stricken Southeast States, including Georgia, Alabama, North Carolina, and South Carolina. In most cases, the railroads have pledged to move donated hay free of charge and to transport hay that is purchased at reduced rates. In some instances, railroad crews are donating their time to move the trains.

I congratulate the railroad industry.

Mr. DEMPSEY. I don't think I quite—would you mind reading that again? [General laughter.]

Senator HECHT. Mr. Buckner, please.

STATEMENT OF MICHAEL BUCKNER, RESEARCH DIRECTOR, UNITED MINE WORKERS OF AMERICA

Mr. BUCKNER. Thank you, Mr. Chairman. I am an underground coal miner from West Virginia and I am the Research Director of the United Mine Workers International Union.

We also have a vested interest in the coal export industry. We represent about two-thirds of all the coal miners in the United States, and because of the nature of the industry with its concentration of miners in the Appalachian Region, we have a lot of miners who are members of the UMWA who are engaged in mining for purposes of export.

The export industry is very important to this country. It usually accounts for about 10 to 12 percent of our annual production and adds about \$4 billion a year positively to our trade imbalance. I think that is very important when we are picking up the papers and looking at a potential for a trade deficit this year approaching \$170 billion, that we recognize the positive contribution of the miners and the industry that delivers that coal.

Perhaps the most important point that I think we should make though is the importance of coal exports to the workers in the communities that are in the Appalachian Region which accounts for most of our exports. There are thousands of miners in Pennsylvania, West Virginia, Virginia, Kentucky, Alabama, Tennessee, all down through the Appalachian chain, whose jobs are dependent on exports. I have provided some figures in my written testimony that you can look at.

You can see that in southern Appalachia, 31 percent of all the shipments in southern Appalachia are bound for foreign ports. About 25 percent of the production in central Appalachia, the eastern Kentucky, southwestern Virginia and southern West Virginia region is export bound, and about 13 percent of northern Appalachia. Those are not the only places that we export coal.

We also have small exports from the Midwest, the Rocky Mountain region and Alaska, but the concentration is in Appalachia.

Based on that concentration of production that is bound for export, we estimate that as many as 28,000 direct coal mining jobs are affected by the export of coal.

That is a lot of jobs in an industry that has an unemployment rate in excess of 30 percent, between 50,000 and 60,000 miners on the streets right now with no expectations of going back to work any time soon.

Those 28,000 jobs are typically in very small communities in Appalachia and the income there drives the economy of those communities. We estimate that the annual income from those direct mining jobs is in the range of \$940 million. That is a significant amount of money in those small communities.

And, as many of us are keenly aware, lots of other jobs depend upon the coal mining industry, in transportation, and the mining machinery industries. It is estimated that for every coal mining job, there is a job created in those industries. That is not to mention the retail and the service jobs that are in those communities—the grocery stores, the banks, the furniture stores and so on.

So, it is obvious that coal exports provide a significant boost to the economies of Appalachia and also a boost to the American economy as a whole.

When we look at what is going to happen with coal exports, the prospects for coal exports, I think it comes down to three basic questions: How much demand will be out there in the future? Who is going to compete to supply that demand? How much of it can we expect to share?

Exports can be divided basically into two different types of exports; steam coal exports and metallurgical coal exports, and you heard before, prior witnesses, that steam coal exports are expected to grow tremendously over the next decade. Metallurgical coal exports will basically be stagnant. We should be ever mindful that our strongest position is in the metallurgical coal area. When we talk about exports, most of our exports are in metallurgical coal and all the projections from the government agencies are that that is going to continue to be our strong suit.

The reason for that is that we have the finest quality coal in the world. All these other folks who are mining coal are not as fortunate as we are in terms of the quality. Quality is very important for metallurgical coal purchases. You can't have impurities there like you do in the steam coal side or you are going to have bad steel making.

I have provided in my written testimony some of the estimates from the Department of Energy on where the demand will be, and how much the demand will be out there. It is clear on the steam side that both the Asian countries and the European market are going to grow tremendously. They are going to share about a 60 million-ton per year growth in that market. The big demand in Europe will come from countries such as Italy, which will probably double its steam coal consumption over the next decade; from Denmark, which will see about a 70-percent increase; from Belgium and from France.

As we all know, France has a fairly aggressive nuclear program and that is going to mitigate somewhat their demand for steam coal, but they are expected to grow.

In Asia, Japan obviously will continue to be the dominant taker of both metallurgical and steam coal. They totally dominate the world demand for imported metallurgical coal, taking almost half of what is out there on the market.

The competition, that is fairly obvious, also. We are going to be in the market, as the witnesses before you have said. Canada is going to get into the steam market more than what they have been

in the past. South Africa is going to be there, Poland is going to be there, Australia is going to be there and we are going to have the new entrants into the market, Colombia and China, which previous witnesses have told you are somewhat subsidized by the United States taxpayers.

I can tell you, the coal miners do not like the idea that their tax money is going to the development of mines whose product is going to come back and take their jobs.

It was mentioned before by Senator Nickles, that it disturbs him; it disturbs the coal miners greatly.

Those temporary jobs that the government witnesses were talking about are just that; they are temporary jobs. They do not make up for the permanent loss of coal mining jobs that will occur as the Colombia coal moves into the United States market even further.

So, the situation will be that there will be severe competition for the growing market. There is no question that the market, at least in the steam coal area, will grow, and there will be growing competition there.

Our share is projected to decline. We will see absolute increases in our levels of imports—that is what the projections tell us, but our share of that growing market will decline.

Others, Australia and South Africa, are projected to maintain their share, so their absolute growth will be even greater than ours. I believe that Australia has exceeded us last year in exports, and for the first time in history, we take second place as the world's leading exporter.

Again, the new exporting countries, China and Colombia, are expected to grow significantly and that I believe will account for some of the erosion in our market share in our traditional markets in Asia and in Europe, and also the Canadian steam coal mines that are coming in.

So, in conclusion, it is obvious that the market is going to grow, that competition is going to be stiff, and that if we don't do something about it, our market share will likely decline. There is a lot of factors that go into making up whether or not we can compete on the world market, and they have been mentioned here before; the cost of production, cost of transportation, the subsidization policies of the foreign countries; and the purchasing policies of the importing countries.

It is our belief that mine production costs have been held static or, in fact, have declined over about the past 8 years. The last three contracts that we have signed, productivity has increased significantly—on the order of 75 to 80 percent in the underground mines.

An unfortunate result of that is that we have a lot of miners unemployed.

We do a lot of discussion with the foreign buyers who come over here. Sometimes they want to stop and visit with our union officials and we have found that they have no complaints about the minemouth costs. The transportation costs is the subject of considerable debate between the coal interests and the railroads. We think that debate oftentimes is clouded with some propaganda, but that is a fairly intense debate and I think it is going to continue.

Subsidized production, that takes a lot of forms. You can deny workers' rights and pay them poverty wages. We see that situation in South Africa. We have some problems with what is going on in Colombia. The Miners International Federation recently reported—last couple of years, not real recently—that there are children working in the small Colombian mines, not the big ones—El Cerrejon, the big one we talked about today. But there are children working in there, long hours, much like we did 100 years ago in this country and that disturbs us greatly.

There are other things that other countries do, they have domestic purchasing quotas, that the buyers have to purchase domestic production before they can go out on the open market. I have seen figures, that in West Germany, the production cost may be \$25 per ton more than that available on the world export market, and the buyers are required to buy that first.

Favorable taxation, lax requirements for health, safety and environmental control. All of these contribute, either individually or taken together, to an economic advantage that our competitors have that we, as a society, we can't maintain in this country.

Perhaps there is little we can do about what they do over there, except in the cases where they try to bring that coal into this country. And I think we should put our foot down very strongly and say that coal that is mined under slave labor conditions, or under substandard health and safety and environmental conditions should not be allowed to come into this country and compete when we, as a society, have said that we will do things the correct way here.

Senator WARNER [presiding]. Almost like our policy on human rights.

Mr. BUCKNER. I think it is very similar, Senator.

The other thing that I think is important is the purchasing decisions that are made in the other countries, and I think here that is very important. It was alluded to earlier in exchange with the chairman and a previous witness. We have to let our trading partners and our allies know that coal exports are at the very top of our agenda.

As I said, it adds \$4 billion and provides lots of jobs in this country, and we have to move that up the agenda and not as a passing comment between the foreign premiers and our Secretary of State, but as a national priority goal, so that they understand that it is very important to all of us in this country that they buy our coal when they want to sell their goods in this country.

Thank you, very much, Mr. Chairman. I would be glad to answer any questions.

[The prepared statement of Mr. Buckner follows:]

STATEMENT OF
UNITED MINE WORKERS OF AMERICA

BEFORE

THE SUBCOMMITTEE ON NATURAL RESOURCES
COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

AUGUST 5, 1986

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

ON BEHALF OF THE OFFICERS AND MEMBERS OF THE UNITED MINE WORKERS OF AMERICA, I WOULD LIKE TO THANK YOU FOR INVITING US TO PRESENT OUR VIEWS ON THE PROSPECTS FOR EXPORTING COAL FROM THE UNITED STATES. THE UMWA HAS A VESTED INTEREST IN COAL EXPORT ISSUES, SINCE MANY OF ITS MEMBERS ARE ENGAGED IN MINING COAL FOR SHIPMENT ABROAD. ALL TOLD, THE UMWA REPRESENTS ABOUT TWO-THIRDS OF ALL COAL MINERS IN THE UNITED STATES. WHILE OUR MEMBERSHIP IS SPREAD THROUGHOUT ALL THE COAL PRODUCING REGIONS OF THE UNITED STATES AND CANADA, A SIGNIFICANT SHARE OF UMWA MINERS ARE CONCENTRATED IN THE COAL PRODUCING STATES THAT COMPRISE APPALACHIA. THIS CONCENTRATION OF MINERS IN THE APPALACHIAN REGION MAKES US PARTICULARLY AWARE OF THE IMPORTANCE OF COAL EXPORTS SINCE THE VAST MAJORITY OF COAL BOUND FOR FOREIGN MARKETS ORIGINATES IN THAT REGION.

COAL IS AN IMPORTANT COMMODITY OF TRADE FOR THE UNITED STATES. ALTHOUGH COAL EXPORTS TYPICALLY ACCOUNT FOR ONLY 10-12 PERCENT OF TOTAL ANNUAL U.S. COAL PRODUCTION, EXPORTS CONTRIBUTE ABOUT \$4 BILLION PER YEAR TOWARD OUR BALANCE OF TRADE. AT A TIME OF RECORD U.S. TRADE DEFICITS THAT MAY APPROACH \$170 BILLION IN 1986, WE MUST RECOGNIZE THE POSITIVE CONTRIBUTION OF COAL EXPORTS. IN ADDITION, THE EXPORT OF AMERICAN COAL SUPPORTS THE BASIC INFRASTRUCTURE OF OUR TRADING PARTNERS' ECONOMIES. ACCESS TO OUR ABUNDANT COAL RESERVES HELPS FREE OUR ALLIES FROM THE HEAVY ECONOMIC YOKE OF THE OPEC CARTEL.

PERHAPS MOST IMPORTANT FOR U.S. CITIZENS IS THAT THE EXPORT OF AMERICAN COAL CREATES JOBS. THOUSANDS OF COAL MINERS IN PENNSYLVANIA, WEST VIRGINIA, KENTUCKY, VIRGINIA AND ALABAMA MINE COAL THAT ULTIMATELY IS CONSUMED IN EUROPE OR ASIA. TABLE I ATTACHED SHOWS THE IMPORTANCE OF COAL EXPORTS TO THE APPALACHIAN REGION.

AS IS READILY SEEN, EXPORTS COMPRISE ABOUT 31 PERCENT OF ALL COAL SHIPMENTS FROM SOUTHERN APPALACHIA, 25 PERCENT OF THE SHIPMENTS FROM CENTRAL APPALACHIA AND 13 PERCENT OF ALL THE COAL SHIPPED FROM MINES IN NORTHERN APPALACHIA. ALTHOUGH SMALL COMPARED TO APPALACHIA, EXPORTS FROM OTHER REGIONS SHOULD NOT BE IGNORED. THE MIDWEST EXPORTED 933 THOUSAND TONS IN 1985, REPRESENTING ABOUT 1 PERCENT OF TOTAL EXPORTS AND .7 PERCENT OF TOTAL SHIPMENTS FROM THE AREA. THE ROCKY MOUNTAIN REGION SHIPPED 976 THOUSAND TONS OVERSEAS, ACCOUNTING FOR ABOUT 1 PERCENT OF TOTAL U.S. EXPORTS AND 1.5 PERCENT OF ALL SHIPMENTS FROM THE REGION. ALASKA SHIPPED ABOUT 500 THOUSAND TONS OF SUBBITUMINOUS COAL OVERSEAS, REPRESENTING ABOUT 36 PERCENT OF ALASKA'S TOTAL PRODUCTION IN 1985. THE ANTHRACITE REGION OF PENNSYLVANIA EXPORTED NEARLY 1.2 MILLION TONS TO CANADIAN AND OVERSEAS BUYERS IN 1985, ACCOUNTING FOR NEARLY 29 PERCENT OF TOTAL ANTHRACITE SHIPMENTS FOR THE YEAR. BASED ON THE SIGNIFICANT SHARE OF COAL SHIPMENTS FROM THOSE IMPORTANT COAL PRODUCING REGIONS, WE ESTIMATE THAT ABOUT 28,000 DIRECT COAL MINING JOBS ARE SUSTAINED BY THE EXPORT OF AMERICAN COAL. THE INCOME

FROM THOSE JOBS PROVIDES A CONSIDERABLE BOOST TO THE ECONOMIES OF THE SMALL COMMUNITIES IN WHICH THE MINERS LIVE. WE ESTIMATE THE DIRECT INCOME FROM THOSE JOBS AT APPROXIMATELY \$940 MILLION PER YEAR. OF COURSE, COAL MINING PROVIDES INDIRECT JOBS IN MINING EQUIPMENT AND SUPPLY INDUSTRIES AND IN COAL TRANSPORTATION AND COAL HANDLING INDUSTRIES. AND IN THE COMMUNITY MANY JOBS IN THE SERVICE AND RETAIL SECTORS ARE SUSTAINED BY THE INCOME OF THE MINERS.

IT IS OBVIOUS THAT THE EXPORT OF AMERICAN COAL PROVIDES SIGNIFICANT ECONOMIC BENEFITS TO THE UNITED STATES AS A WHOLE AND TO APPALACHIA IN PARTICULAR. IN LOOKING AT THE PROSPECTS FOR COAL EXPORTS, SEVERAL QUESTIONS NEED TO BE EXAMINED:

- 1) HOW MUCH DEMAND FOR COAL IS OUT THERE?
- 2) WHO WILL COMPETE TO SUPPLY THE EXPORT COAL?
- 3) HOW MUCH CAN THE U.S. REASONABLY EXPECT TO SUPPLY?

WORLD COAL IMPORT DEMAND

THE WORLD MARKET FOR IMPORT COAL IS DIVIDED INTO THE STEAM COAL MARKET AND THE METALLURGICAL COAL MARKET. STEAM COAL IS USED PRIMARILY IN THE GENERATION OF ELECTRICITY, BUT ALSO HAS APPLICATIONS IN INDUSTRY AND COMMERCE. METALLURGICAL GRADE COALS, ON THE OTHER HAND, ARE USED ALMOST EXCLUSIVELY IN THE MANUFACTURE OF COKE WHICH IS USED IN THE PRODUCTION OF STEEL.

AT THE PRESENT TIME, IMPORT COAL DEMAND IS EQUALLY DIVIDED BETWEEN STEAM COAL AND METALLURGICAL COAL. IN 1984, WORLD DEMAND FOR IMPORTED STEAM COAL WAS 154 MILLION TONS WHILE DEMAND FOR IMPORTED METALLURGICAL COAL STOOD AT 158 MILLION TONS. WHILE THE AMOUNT OF IMPORT DEMAND WAS EQUALLY DIVIDED, HOWEVER, THE DISTRIBUTION BETWEEN SECTORS WAS NOT. STEAM COAL IMPORT NEEDS WERE DOMINATED BY WESTERN EUROPEAN NATIONS WHICH ACCOUNTED FOR NEARLY HALF OF TOTAL WORLD IMPORT DEMAND. SMALLER SHARES WERE CONSUMED BY ASIA (37 MILLION TONS), EASTERN EUROPE (27 MILLION TONS) AND CANADA (13 MILLION TONS). DEMAND FOR IMPORTED METALLURGICAL COAL WAS DOMINATED BY ASIAN COUNTRIES WHICH ACCOUNTED FOR NEARLY 55 PERCENT OF TOTAL IMPORT DEMAND. WITHIN THE ASIAN REGION, JAPAN WAS BY FAR THE LARGEST CONSUMER WITH 74 MILLION TONS OF IMPORTED METALLURGICAL COAL, MAKING IT THE LARGEST COAL IMPORTER IN THE WORLD. WESTERN EUROPE RANKED SECOND IN METALLURGICAL COAL IMPORTS WITH 42 MILLION TONS, FOLLOWED BY EASTERN EUROPE (13 MILLION TONS, SOUTH AMERICA (10 MILLION TONS) AND CANADA (8 MILLION TONS).

TABLES II AND III ATTACHED PROVIDE ESTIMATES OF STEAM AND METALLURGICAL COAL IMPORT DEMAND IN 1995. IT IS OBVIOUS FROM THESE PROJECTIONS THAT GROWTH IN WORLD COAL DEMAND IN THE COMING DECADE WILL DERIVE FROM INCREASED NEEDS FOR STEAM COAL, WHILE DEMAND FOR IMPORTED METALLURGICAL COAL WILL REMAIN ESSENTIALLY STAGNANT. DEMAND FOR IMPORTED STEAM COAL IS EXPECTED TO RISE TO 287 MILLION TONS IN 1995, AN INCREASE OF

133 MILLION TONS OR 86 PERCENT OVER THE 1984 LEVEL. THE INCREASED DEMAND WILL BE SHARED ALMOST EQUALLY BETWEEN WESTERN EUROPE AND ASIA. IN WESTERN EUROPE, THE COUNTRIES WITH THE GREATEST INCREASES IN DEMAND ARE ITALY, DENMARK, BELGIUM AND FRANCE. SEVERAL OTHER WESTERN EUROPEAN NATIONS WILL HAVE STEAM COAL IMPORT NEEDS THAT, WHEN TAKEN TOGETHER, REPRESENT SIGNIFICANT MARKET OPPORTUNITIES. IN ASIA, JAPAN WILL CONTINUE TO BE THE DOMINANT STEAM COAL IMPORTER BUT THE FAST DEVELOPING ECONOMIES OF SOUTH KOREA, TAIWAN AND HONG KONG ALSO WILL EXPERIENCE SIGNIFICANT GROWTH IN STEAM COAL DEMAND.

WHILE STEAM COAL REPRESENTS THE AREA OF SUBSTANTIAL GROWTH IN THE FUTURE, METALLURGICAL COAL WILL CONTINUE TO REPRESENT A SIGNIFICANT MARKET FOR COAL EXPORTERS. DEMAND FOR IMPORTED METALLURGICAL COAL IS EXPECTED TO GROW FROM 158 MILLION TONS IN 1984 TO 168 MILLIONS TONS IN 1995. THIS STAGNATION REFLECTS WORLDWIDE DECREASES IN DEMAND FOR STEEL DUE TO INCREASED USE OF ALUMINUM AND PLASTICS AND CHANGES IN STEEL-MAKING TECHNOLOGY THAT REQUIRE LESS COAL AND COKE.

COAL EXPORT COMPETITION

SINCE WORLD COAL IMPORT DEMAND IS EXPECTED TO INCREASE FROM 312 MILLION TONS IN 1984 TO 455 MILLION TONS IN 1995, THERE IS ABUNDANT OPPORTUNITY FOR COAL EXPORTERS TO COMPETE FOR BUSINESS. NOT SURPRISINGLY, EXPECTATIONS OF INCREASED DEMAND

HAVE CAUGHT THE ATTENTION OF COAL PRODUCERS IN MANY COUNTRIES. HISTORIC WORLD COAL SUPPLIERS ARE GEARING UP TO FULFILL THE ADDITIONAL DEMAND AND NEW SUPPLIERS ARE BRINGING CAPACITY ON LINE TO CAPTURE A SHARE OF THE WORLD MARKET.

IN THE RECENT PAST, THE MAJOR COAL EXPORTING NATIONS HAVE BEEN THE UNITED STATES, AUSTRALIA, POLAND, SOUTH AFRICA, CANADA AND THE U.S.S.R. THESE COUNTRIES ACCOUNTED FOR NEARLY 96 PERCENT OF WORLD COAL IMPORTS IN 1984. TRADITIONALLY, AUSTRALIA AND CANADA SHIP THE MAJORITY OF THEIR COAL EXPORTS TO THE PACIFIC RIM COUNTRIES WHILE SOUTH AFRICA AND POLAND MARKET THEIR COAL EXPORTS PRIMARILY IN EUROPE. THE SOVIET UNION SHIPS ITS COAL EXPORTS PRIMARILY TO EASTERN EUROPEAN NATIONS WHILE THE U.S. TRADITIONALLY HAS HELD A STRONG POSITION IN BOTH THE ASIAN AND EUROPEAN MARKETS. NEW ENTRANTS IN THE WORLD COAL MARKET INCLUDE COLOMBIA AND CHINA, BOTH OF WHICH ARE DEVELOPING WORLD CLASS MINES (GREATER THAN 15 MILLION TONS PER YEAR OUTPUT) THAT ARE DESIGNED PRIMARILY FOR THE EXPORT MARKET.

TABLES IV AND V ATTACHED SHOW THE SUPPLIERS OF IMPORT COAL TO JAPAN AND WESTERN EUROPE FOR THE YEARS 1981-1984. AS IS APPARENT FROM THE TABLES, THE U.S. ENJOYED A VERY STRONG POSITION IN BOTH MARKETS IN THE 1981-1982 PERIOD. THIS WAS A TEMPORARY SURGE IN U.S. EXPORT DEMAND, RESULTING FROM THE VIRTUAL WITHDRAWAL OF POLAND FROM THE EXPORT MARKET AND A

SERIES OF STRIKES IN AUSTRALIA IN THE FACE OF RAPIDLY INCREASING WORLD DEMAND. AS THOSE COUNTRIES RETURNED TO THE WORLD MARKET, U.S. EXPORTS DECLINED. U.S. COAL EXPORTS ARE NOT EXPECTED TO REACH THE LEVELS OF THE EARLY 1980s UNTIL THE MIDDLE OF THE 1990s.

U.S. SHARE OF WORLD COAL MARKETS

THE WORLD COAL MARKET IS EXPECTED TO REMAIN HIGHLY COMPETITIVE IN THE NEXT DECADE. ALL MAJOR EXPORTING COUNTRIES, AS WELL AS THE NEW ENTRANTS, ARE EXPECTED TO SHARE IN THE ABSOLUTE GROWTH OF THE WORLD COAL MARKET. WHILE CURRENT TRADE PATTERNS ARE NOT EXPECTED TO CHANGE DRAMATICALLY, THERE WILL BE SOME SHIFTING OF MARKET SHARES AMONG EXPORTING COUNTRIES. POLAND AND THE UNITED STATES, WHILE GROWING IN ABSOLUTE TERMS, WILL EXPERIENCE SOME EROSION OF MARKET SHARE. AUSTRALIA AND SOUTH AFRICA ARE EXPECTED TO MAINTAIN THEIR PERCENTAGE SHARES AS THE MARKET GROWS. CANADA AND THE NEW EXPORTING COUNTRIES OF COLOMBIA AND CHINA ARE PROJECTED TO INCREASE SIGNIFICANTLY THEIR SHARES OF THE WORLD MARKET. TABLE VI ATTACHED SHOWS THE PROJECTED EXPORTS OF MAJOR EXPORTING COUNTRIES IN 1995.

CONCLUSION

WORLD DEMAND FOR IMPORT COAL IS EXPECTED TO INCREASE SIGNIFICANTLY IN THE COMING DECADE. BY FAR, THE LARGEST INCREASE

WILL OCCUR IN THE STEAM COAL SECTOR. U.S. EXPORTS OF STEAM COAL ARE PROJECTED TO INCREASE FROM 26 MILLION TONS IN 1984 TO 38 MILLION TONS IN 1995, WITH MOST OF THE INCREASE STEMMING FROM WESTERN EUROPE. THE U.S. SHARE OF THE STEAM COAL MARKET, HOWEVER, IS EXPECTED TO DECLINE. THE EXPECTED "WINNERS" IN THE STEAM COAL MARKET ARE AUSTRALIA, SOUTH AFRICA, CANADA, COLOMBIA AND CHINA.

IN THE METALLURGICAL COAL MARKET, THE U.S. IS EXPECTED TO MAINTAIN ITS DOMINANT ROLE, PRIMARILY BECAUSE OF THE HIGH QUALITY OF OUR METALLURGICAL COAL RESERVES. AUSTRALIA AND CANADA WILL CONTINUE AS THE OTHER SIGNIFICANT SUPPLIERS OF METALLURGICAL COAL. THE DISTRIBUTION OF MARKET SHARE AMONG METALLURGICAL COAL EXPORTERS IS EXPECTED TO REMAIN ESSENTIALLY CONSTANT IN THE NEXT DECADE.

MANY FACTORS WILL COMBINE TO DETERMINE OUR ABILITY TO COMPETE IN THE WORLD COAL MARKET. THESE INCLUDE MINE PRODUCTION COSTS, TRANSPORTATION COSTS (BOTH INLAND AND OCEAN), SUBSIDIZATION POLICIES OF COAL EXPORTING COUNTRIES AND PURCHASING POLICIES OF IMPORTING NATIONS. MINE PRODUCTION COSTS HAVE BEEN HELD CONSTANT (OR HAVE DECLINED) OVER THE PAST EIGHT YEARS AND ARE NOT CONSIDERED AN IMPEDIMENT TO U.S. COMPETITION IN THE WORLD COAL MARKET. TRANSPORTATION COSTS HAVE BEEN, AND CONTINUE TO BE, A SUBJECT OF CONSIDERABLE DEBATE AMONG COAL PRODUCERS, RAILROADS AND COAL IMPORTERS. SUBSIDIZED PRODUCTION

CAN TAKE MANY FORMS -- DENIAL OF WORKERS' RIGHTS AND PAYMENT OF POVERTY WAGES, DOMESTIC PURCHASING QUOTAS, STATE OWNERSHIP, LOW INTEREST LOANS AND FAVORABLE TAXATION AND LAX REQUIREMENTS FOR HEALTH, SAFETY AND ENVIRONMENTAL CONTROL. ANY OF THESE PRACTICES, OR COMBINATIONS THEREOF, CAN PROVIDE ECONOMIC ADVANTAGES TO OUR COMPETITORS IN THE COAL EXPORT MARKET.

PERHAPS THERE IS LITTLE THAT WE CAN DO ABOUT COAL PRODUCTION THAT RECEIVES SUCH SUBSIDIES, EXCEPT IN CASES WHERE THAT COAL SEEKS MARKETS IN THE UNITED STATES. BUT WE SHOULD SEEK TO EXERCISE INFLUENCE OVER THE PURCHASING PRACTICES OF OUR TRADING PARTNERS. WE SHOULD MAKE IT WIDELY KNOWN AMONG OUR ALLIES THAT COAL EXPORTS ARE A PRIORITY ITEM ON OUR TRADE AGENDA. THEY CURRENTLY VIEW US AS A SWING SUPPLIER BECAUSE THEY PERCEIVE THAT COAL IS NOT A PRIORITY COMMODITY OF TRADE FOR THE UNITED STATES. WE MUST CORRECT THAT MISPERCEPTION BY MOVING COAL TO THE TOP OF OUR TRADE AGENDA. PERHAPS THEN WE CAN MAINTAIN AND IMPROVE OUR SHARE OF THE GROWING WORLD COAL MARKET.

THANK YOU.

TABLE I

<u>ORIGIN OF U.S. COAL EXPORTS, 1985</u>					
<u>(000 TONS)</u>					
	<u>CANADA</u>	<u>OVERSEAS</u>	<u>TOTAL</u> <u>EXPORT</u>	<u>ALL</u> <u>SHIPMENTS</u>	<u>EXPORTS AS A</u> <u>% OF ALL SHIPMENTS</u>
N. APPALACHIA	8,267	11,702	19,969	157,430	12.68
C. APPALACHIA	7,453	51,111	58,564	232,297	25.21
S. APPALACHIA	0	9,169	9,169	29,924	30.64
OTHER	<u>365</u>	<u>3,851</u>	<u>4,216</u>	<u>460,802</u>	<u>0.91</u>
TOTAL	16,085	75,833	91,919	880,453	10.44

SOURCE: U.S. DEPARTMENT OF ENERGY, ENERGY INFORMATION ADMINISTRATION.

TABLE II

STEAM COAL IMPORT DEMAND(MILLION TONS)

<u>EUROPE</u>	<u>1984</u>	<u>1995</u>
FRANCE	13	18
ITALY	12	25
DENMARK	10	17
WEST GERMANY	9	10
NETHERLANDS	6	8
BELGIUM	4	11
FINLAND	4	8
ISRAEL	4	7
SPAIN	4	7
OTHER	<u>9</u>	<u>23</u>
TOTAL	75	134
 <u>ASIA</u>	 <u>1984</u>	 <u>1995</u>
JAPAN	20	39
SOUTH KOREA	7	22
HONG KONG	5	13
TAIWAN	5	18
OTHER	<u>*</u>	<u>6</u>
TOTAL	37	92
 EASTERN EUROPE	 27	 41
CANADA	13	9
UNITED STATES	1	5
	154	207

*LESS THAN 500,000 TONS.

SOURCE: U.S. DEPARTMENT OF ENERGY, ENERGY INFORMATION ADMINISTRATION.

TABLE III

<u>METALLURGICAL COAL IMPORT DEMAND</u>		
	<u>(MILLION TONS)</u>	
	<u>1984</u>	<u>1995</u>
ASIA	86	89
JAPAN	74	72
SOUTH KOREA	9	12
TAIWAN	3	6
WESTERN EUROPE	42	47
ITALY	9	11
FRANCE	6	7
UNITED KINGDOM	6	3
BELGIUM	4	4
NETHERLANDS	4	4
SPAIN	4	3
AUSTRIA	3	3
OTHER	6	12
EASTERN EUROPE	13	11
SOUTH AMERICA	10	14
CANADA	8	8
TOTAL	158	168

SOURCE: U.S. DEPARTMENT OF ENERGY, ENERGY INFORMATION ADMINISTRATION.

TABLE IV

ORIGIN OF EUROPEAN COAL IMPORTS, 1981-1984
(000 TONS)

<u>EXPORTERS</u>	<u>1981</u>		<u>1982</u>		<u>1983</u>		<u>1984</u>	
	<u>NET</u>	<u>STEAM</u>	<u>NET</u>	<u>STEAM</u>	<u>NET</u>	<u>STEAM</u>	<u>NET</u>	<u>STEAM</u>
UNITED STATES	21844	26331	22543	24838	15327	15723	19978	9274
AUSTRALIA	4890	3604	4498	2542	5150	4094	8182	9053
WEST GERMANY	8485	3000	5430	3802	6083	3534	5354	5545
CANADA	424	1234	262	1250	262	1124	691	1402
UNITED KINGDOM	528	9046	333	7208	279	6102	40	2327
OTHER OECD	385	1848	152	1844	80	1804	72	2849
 SOUTH AFRICA	 374	 19787	 0	 18280	 228	 16714	 83	 21319
POLAND	2466	4499	3655	8433	3915	11134	5074	17538
SOVIET UNION	301	1558	297	1437	607	2154	941	2304
CHINA	0	143	0	157	0	147	0	135
CZECHOSLOVAKIA	860	218	911	284	944	213	1059	331
OTHER NON-OECD	24	384	0	240	27	187	34	525
 TOTAL IMPORTS	 40583	 71694	 38083	 70315	 32904	 62952	 41734	 72844

SOURCE: INTERNATIONAL ENERGY AGENCY

NOTE: FIGURES EXPRESSED IN METRIC TONS (2,200 POUNDS PER TON)

TABLE V

ORIGIN OF JAPANESE COAL IMPORTS, 1981-1984								
(000 TONS)								
EXPORTERS	1981		1982		1983		1984	
	NET	STEAM	NET	STEAM	NET	STEAM	NET	STEAM
UNITED STATES	21761	2079	23423	1642	14752	912	14900	500
AUSTRALIA	29148	5427	25227	6452	28218	7915	29400	10300
CANADA	9252	1199	9633	1287	10423	583	15100	700
OTHER OECD	124	19	147	33	214	32	0	0
SOUTH AFRICA	2723	1625	3282	2823	3078	3071	4500	3100
POLAND	65	0	0	0	0	0	0	0
SOVIET UNION	1112	1625	1120	212	1467	482	1400	900
CHINA	1148	1614	1301	1717	1498	2252	1300	2600
OTHER NON-OECD	0	376	5	232	0	228	300	300
TOTAL IMPORTS	65333	12625	64138	14398	59650	15475	67300	18400

SOURCE: INTERNATIONAL ENERGY AGENCY

NOTE: FIGURES EXPRESSED IN METRIC TONS (2,200 POUNDS PER TON)

TABLE VI

EXPORTING COUNTRIES	IMPORTING REGIONS							
	1984				1995			
	WESTERN EUROPE	ASIA	OTHER	TOTAL	WESTERN EUROPE	ASIA	OTHER	TOTAL
STEAM COAL								
UNITED STATES	10	3	13	26	22	7	9	38
AUSTRALIA	11	19	0	30	10	52	*	62
SOUTH AFRICA	27	8	1	35	55	2	0	57
POLAND	19	0	16	36	23	0	19	42
CANADA	2	2	*	4	2	20	2	24
COLOMBIA	0	0	*	*	20	0	3	23
U.S.S.R.	2	1	11	15	0	0	22	22
CHINA	*	4	0	4	0	18	0	18
OTHER	4	1	0	5	0	0	0	0
TOTAL	75	37	42	154	134	98	55	287
METALLURGICAL COAL								
UNITED STATES	23	19	14	56	30	18	17	64
AUSTRALIA	10	38	2	50	10	43	1	54
SOUTH AFRICA	*	5	0	5	0	3	0	3
POLAND	6	0	6	12	5	0	6	11
CANADA	1	21	1	23	2	21	2	24
COLOMBIA	0	0	0	0	0	0	0	0
U.S.S.R.	1	2	5	8	0	3	6	9
CHINA	0	1	2	3	0	2	0	2
OTHER	1	*	0	2	0	0	0	0
TOTAL	42	86	31	158	47	89	32	168

TABLE VI Continued . . .

	TOTAL COAL							
UNITED STATES	33	22	27	81	52	24	26	102
AUSTRALIA	20	57	2	80	20	95	1	116
SOUTH AFRICA	27	13	1	41	55	5	0	60
POLAND	25	0	22	47	28	0	25	54
CANADA	2	22	2	27	4	40	4	48
COLOMBIA	0	0	*	*	20	0	3	23
U.S.S.R	4	3	16	23	0	3	29	32
CHINA	*	6	2	8	0	20	0	20
OTHER	5	1	0	6	0	0	0	0
TOTAL	117	124	72	312	180	187	87	455

SOURCE: U.S. DEPARTMENT OF ENERGY, ENERGY INFORMATION ADMINISTRATION.

* LESS THAN 500,000 TONS.

Senator WARNER. Thank you. I understand that we are joined this morning by Mr. W.B. Bales, Vice President, Coal and Ore Traffic, Norfolk Southern Railroad. Do you have a statement? We would be happy to receive your testimony, Mr. Bales.

Mr. BALES. Mr. Chairman, I do have a statement that I would like to submit for the record, and I will be available for any questions.

Senator WARNER. Well, why don't you go ahead and give a synopsis of your statement?

STATEMENT OF WILLIAM B. BALES, VICE PRESIDENT, COAL AND ORE TRAFFIC, NORFOLK SOUTHERN CORP.

Mr. BALES. As you know, Norfolk Southern has been in the coal hauling business for well over 100 years, and in fact, we moved our first carload of coal from Lambert's Point to Norfolk in 1985. The export part of our business has always been very important and has continued to grow during the 1950's and 1960's, and became a bit stagnant during the 1970's, and then grew again in the early 1980's—1980, 1981, and 1982.

It has fallen back somewhat in the last few years, particularly because of the difference in the buyers abroad coming to the United States in the 1980-81-82 period because of the difficulties in Australia, Poland, and South Africa.

Export coal continues to be a very important part of our business and we believe that in our company, Norfolk Southern, we have responded to the needs of our transshippers and receivers abroad by utilizing the capabilities, the efficiencies in the Staggers Act to contract with those receivers and those shippers to promote the continued purchasing of the high quality U.S. coal.

We handled last year, through our facility, approximately 28 million tons of export coal. This was similar in volumes to our better years. Only the years of 1980-81-82 being larger volumes. Approximately 90 percent of our coal is metallurgical coal and has been purchased by the steel companies in Europe and Asia for many years.

We believe we are responding to the needs of those receivers abroad and to our shippers here in the United States by reacting with innovative policies, pricing actions that would continue to promote the movement of coal from mines on our system.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Bales follows:]

Statement of

WILLIAM B. BALES
Vice President - Coal and Ore Traffic
Norfolk Southern Corporation

Before the

Subcommittee on Natural Resources, Development and Production
of the
Committee on Energy and Natural Resources
United States Senate

August 5, 1986

Mr. Chairman and Members of the Subcommittee:

My name is William B. Bales. I am Vice President - Coal and Ore Traffic of Norfolk Southern Corporation, which owns all the common stock of the Class I railroads, Norfolk and Western Railway Company and Southern Railway Company.

I appreciate this opportunity to testify with respect to Norfolk Southern's role in assuring that United States coal mined in the areas our rail subsidiaries serve has the opportunity to compete in world markets.

Coal produces and our railroads have enjoyed an interdependent relationship for many years. Norfolk and Western moved its first carload of coal from the premier Pocahontas fields to Norfolk, Virginia in March 1883 and its first carload to be loaded over a pier in Norfolk in 1885. Since then, NW has transported more than 1.3 billion tons of coal to Norfolk, the majority of which has been destined for international markets. In fact, NW historically has loaded the major share of the coal exported from the United States.

Moreover, because of the consolidation of Norfolk and Western and Southern, coal mined on Southern now has

single-system access to ports served by NW, and NW coal has similar access to ports served by Southern.

Recognizing its essential partnership with the coal producers it serves, Norfolk Southern has invested significant amounts of its own resources to encourage use of coal abroad. Our approximately 60,000 hopper cars, a fleet which by design is kept large enough to meet the requirements of all our coal shippers, are built and maintained in our own modern shops. We serve 400 mines over thousands of miles of track in the coalfields, and our mainline from the Southern Appalachian fields to our Lamberts Point piers in Norfolk is largely double track. All our trackage is maintained to the highest standards.

At Lamberts Point, our very efficient Pier 6, built at a cost of approximately \$25,000,000 and dedicated in 1963 -- when there was no assurance at all that this investment would pay off -- was and remains the world's largest and fastest coal-loading facility. It continues to handle more export coal than any other facility in the United States; since 1980, more than 1/3 of all coal exported from this country moved over Lamberts Point.

Data in the attached Table I indicate the tonnages moved over Lamberts Point between 1971 and the first 5 months of 1986. Of course, there are many variables which have an impact on the competitiveness of U.S. coals in international markets, and many of them are more important than rail transportation charges. But, if coal tonnage dumped is a measure of the influence of rail charges, the table indicates

that Norfolk Southern is doing a highly creditable job. Except for the atypical years of 1980-82 when coal supplies from Australia, Poland and South Africa were partially interrupted, our 1985 tonnage was greater than in any year since 1970.

Norfolk Southern has been an innovative and responsible marketer. The Staggers Rail Act of 1980 partially deregulated the railroad industry and allowed us to enter into transportation contracts with our customers--with positive results for domestic coal suppliers, foreign receivers and Norfolk Southern. By contract, we guarantee car supply and transit time from mine to port, permitting very efficient use of expensive ocean-going vessels and of our own equipment. Because they allow us to schedule activities at Pier 6 more efficiently, service contracts permit better use of existing capacity, and because many contracts cover long periods, they also permit us to negotiate concessions that otherwise would not be possible. All of this generates savings which have a direct, beneficial effect on the delivered cost of coal abroad.

And this is also true of our transportation rates. We know that we cannot move what producers on our lines cannot sell. Norfolk Southern has no intention of implementing a pricing policy that would erode its share of the export coal market. We have shown considerable restraint in taking even those cost-recovery increases authorized by the Interstate Commerce Commission. As a matter of fact, we have not taken a single Commission-authorized increase in our export coal tariff rates for 4-1/2 years. And contract rates, affecting more than

90% of our export coal traffic, actually are lower than they were 4-1/2 years ago.

Even though our contracts with shippers contain confidential terms, I can say unequivocally that we have made important concessions concerning rates and service to keep the coal we haul competitive in the market. Our Chairman and Chief Executive Officer, Executive Vice President - Marketing and I make regular trips to Europe and the Pacific Rim to promote the sale of U.S. coal. It is very clear from our conversations with receivers that Norfolk Southern's ability to make such concessions is vitally important. Table II indicates the countries to which coal dumped over Lamberts Point has been shipped this year.

The accuracy of this impression is both acknowledged in the May 9, 1986, "Final Report of U.S.-Italian Coal Logistics" prepared by the United States Department of Energy and Italy's Ministero Industria Commercio e Artigianato and demonstrated by the increase in exports to Italy of coal Norfolk Southern handles.

We believe that there are additional ways to make the coals we handle more competitive abroad. For instance, Norfolk Southern has endorsed deepening the channel at Hampton Roads to accommodate supercolliers. And in the meantime, we have committed significant capital and managerial resources to offer a "topping-off" service. Partially loaded supercolliers would rendezvous miles off shore with a 35,000-ton self-discharging

barge (constructed at a cost to Norfolk Southern of \$20,000,000) in Delaware Bay, which offers the only naturally protected deepwater anchorage between Maine and Florida.

There, the colliers would be loaded to capacity (topped-off), and the resulting transportation economies could reduce the delivered price of U.S. coal to foreign receivers. We have been capable of providing this service since the middle of 1984; however, environmental complications have prevented us from initiating it.

With over 100 years of experience in moving coal for export and with its demonstrated capacity to adapt to changes in the export coal market, Norfolk Southern is well positioned to participate in and to facilitate long-term growth in U.S. steam coal exports and to maintain its position as a principal carrier of metallurgical coal for export.

We plan to continue to work closely with our friends in the coal industry to assure that they and we remain the coal suppliers and the coal carrier to the world.

TABLE I

Lamberts Point Coal Exports - 15 Year Summary

<u>Year</u>	<u>Exports (000 tons)</u>
1971	25,191
1972	24,905
1973	23,873
1974	25,584
1975	25,706
1976	23,433
1977	18,939
1978	9,456
1979	23,021
1980	30,540
1981	31,861
1982	34,605
1983	24,091*
1984	24,142*
1985	27,128
5 mos. 1986	11,130

* Reduction resulted in part from the renewed availability of coals from Australia, Poland and South Africa and from reduced world demand. Even though exports over Lamberts Point decreased quantitatively from 1982 to 1983, they represented an increased percentage of total U.S. coal exports, an indication of imaginative and aggressive use of the contracting freedoms afforded by Staggers.

TABLE II

Countries to Which Coal Dumped Over Lamberts Point is Destined1986

Algeria
Argentina
Belgium
Brazil
Canada
Chile
Denmark
France
Germany
Holland
Iceland
Italy
Japan
Korea
Portugal
Romania
Spain
Sweden
Taiwan
Turkey
United Kingdom
Yugoslavia

Senator WARNER. Now we will hear from Mr. Byung Chang Yoo, General Manager, Washington Office, Pohang Iron Steel.

STATEMENT OF BYUNG CHANG YOO, GENERAL MANAGER, WASHINGTON OFFICE, POHANG IRON & STEEL CO., LTD., OF SOUTH KOREA

Mr. Yoo. My name is Byung Chang Yoo, and I am the General Manager of the Washington Office of Pohang Iron & Steel Company, Limited, of South Korea, or POSCO for short.

I am here today to present POSCO's coking coal requirements in the future. My presentation will cover three important areas of POSCO's coal demand. The first is a review of the current steel-making capacity and coal consumption at the Pohang Steel Works, along with a preview of the new POSCO capacity at the Kwangyang Steel Works, which is presently under construction.

Secondly, I will touch the coking coal requirements needed by POSCO for the support of such steelmaking capacities, both in the past and in the future. And, finally, I will address the parameters surrounding further sales of American coals into POSCO's buying strategies.

Pohang Iron & Steel Co., Ltd. was incorporated on April 1, 1968, and its first stage of 1.03 million ton crude steel production facility started operation July 3, 1973. Successfully implementing the subsequent three stages of its expansion program, the company completed its 8.5 million ton capacity facilities on February 18, 1981.

With some modification of existing facilities, Pohang Steel Works attained its ultimate goal of 9.1 million ton capacity on May 24, 1983. The actual crude steel production of POSCO increased steadily as each successive expansion project was completed. There has never been a single year in the past 13 years of its operation that the Pohang Steel Works has operated below its capacity.

At the present time, Korea's per capita crude steel production stands at the low level of less than 0.3 of a ton. In order to upgrade the industrial structure of Korea to the level of the developed countries, we have to have a minimum steelmaking capacity of 0.5 ton per capita.

In line with that philosophy, POSCO is proceeding with construction of a new steel mill at Kwangyang Bay on the southern coast of Korean Peninsula. The Kwangyang Steel Works' ground breaking ceremony was held on March 5, 1985.

Its initial stage of 2.7 million tons of annual crude steel production capacity will be completed at the end of June 1987. POSCO will embark the second stage expansion at the Kwangyang Steel Works to bring the capacity up by another 2.7 million tons per year.

This phase will begin in March 1987 and be completed by the end of 1988. Any further expansion will depend upon further growth of steel demand.

Together with the construction of the Kwangyang Steel Works, POSCO has built a central terminal system, which is a central bulk cargo redistribution terminal, CTS, adjacent to site of new steel works.

It commenced operations April 10, 1986, with an annual throughput capacity of 5 million tons of coal. The company has a plan to expand the redistribution terminal facilities to keep pace with the ever increasing volume of bulk materials, especially coal imported by users other than ourselves.

The conception of this project originated from the fact that Kwangyang has a natural deep harbor, whereas it would require a huge investment to expand the currently very small facilities at several different locations used by such coal customers as cement manufacturers and power plants.

This terminal will serve as a transshipment base from which coal discharged from vessels of up to 250,000 tons, plus, will be stored and then reloaded into small vessels for the transportation to nearby coal users' ports. In so doing, it is possible to achieve a reduction in seaborne freight by avoiding the use of small vessels for long ocean haulage due to limited port facilities.

At present, this terminal is designed to serve domestic coal users only, but we have a high hope that it can be of service to nearby countries importing not only coal but also other bulk materials.

Korea has limited production of anthracite but unfortunately, it is not endowed with any metallurgical coal reserves. Accordingly, our coal requirement depends completely upon imports. Therefore, to ensure an uninterrupted supply, long-term supply contract arrangements were practiced from the very beginning of our operation. In addition to long-term contracts, we have actively participated in overseas coal mine development projects through international cooperation.

Now POSCO has three coal mines partly or wholly owned, one each in three major coal exporting countries, the United States, Australia, and Canada.

This year, these three subsidiaries will supply about 27 percent of our coal requirements.

Due to repeated oil price hikes following the second oil crisis in 1979, the Pohang Steel Works have had an all-coke operation for each blast furnace since early 1983. The Pohang Steel Works has a coal briquetting facility. Primarily, this facility was introduced to use weak coking coal in coal blending for coke making and thereby enable us to reduce the coke production cost as compared with the traditional method.

However, with more emphasis put on stable operation of the blast furnaces with large inner volume, this coal briquetting facility is utilized in improving the coke strength without changing the blending ratios of different types of coal.

We are carefully studying the possibility of reopening the oil injection facilities at our blast furnaces as a result of big drop in oil prices. We are also considering direct-blending of weak coking coal in coke making. Although these studies will not produce an immediate conclusion resulting in any noticeable change in coal blending methods, we will continue to study any possible way which can reduce costs.

The operation of the blast furnace in the Kwangyang Steel Works will also adopt an all coke operation as at the Pohang Steel Works. The pulverized coal injection facility will be added to im-

prove energy efficiency and therefore, we plan to substitute about seven percent of required coking coal by weak coking coal.

POSCO's coking coal import in 1985 reached 7.8 million tons, representing about an eleven-fold increase over that of 1973, when it began its initial operation.

POSCO imported 2.038 tons of American coking coal, valued at \$130 million, or 26 percent of its total annual requirement in 1985. It was comprised of 160,000 tons of low, volatile coking coal, 1.2 million tons of medium volatile coking coal, 410,000 tons of high volatile coking coal and 268,000 tons of petroleum coke.

In 1986, POSCO plans to import about 7.5 million tons in total. We have already achieved our ultimate crude steel production capacity of 9.1 million tons, and the coal requirement of Pohang Steel Works will not show any remarkable change from this level, unless a drastic change occurs in the world energy markets.

Each stage of the Kwangyang Steel Works will add about 2 million tons to our annual coal requirement, reaching 9.6 million tons and 11.6 millions in 1988 and 1989, respectively.

Under the assumption of a 23- to 25-percent contribution from U.S. coal sources for the new steel works, we expect an additional requirement of about 500,000 tons of new U.S. coal for each stage of Kwangyang Steel Works.

I would like to close my presentation by commenting on three issues with regard to the future import of coking coal from the United States.

First, our biggest concern in purchasing coking coal is price. We hope that the U.S. coking coal will become more price competitive on an arrival-cost basis. According to the 1985 statistics, as shown in table 2, United States coking coal price on CIP Pohang base per ton was more than \$6 and \$11 higher than Canadian and Australian coals, respectively.

Though we recognize U.S. coal has good quality of low ash and high fluidity, its current price is more than what it should be compared with its competitors.

We fear this gap will not be narrowed in the near future in view of present restrictions in facilities at U.S. ports and the bigger sized vessels POSCO intends to employ in its raw materials transportation, for example, 180,000 tonners, and above.

We hope that the American coal industry and related interests can find a way to improve this disadvantageous infrastructure problem, and also improve the inland transportation system so that American coal is more attractive, especially for the distant customers in the Far East.

So long as American coal remains competitive in the international market, we will be able to maintain or even increase the share of U.S. coal in our overall requirements of coking coal, otherwise, we have no alternative but to gradually reduce the portion of U.S. coal.

Secondly, POSCO is entirely dependent upon overseas supply for its coal requirements, as I mentioned earlier. Therefore, what should be stressed is the importance of a stable and uninterrupted supply of coal.

We are fully aware of the fact that the United States of America is the best country in the world in terms of coal reserves, total production and the tonnage exported.

We also understand the stability and the reliability of U.S. coal supply. We have a high regard for the current smooth and stable labor relationships existing in the industry and hope this trend will continue in the future.

High cost of American coal and stable supply are not POSCO's only concern. As a developing nation, Korea relies heavily on its trading capability to help its growth and prosperity.

Recent trends of growing trade protectionism have us worried. If our coal markets are to remain open to free competition, then we think the same equal free trade should be allowed in the export of our products into the U. S. A. If the current protectionism tendency is realized in the United States, POSCO will inevitably be pressured to diversify its coking coal markets to the countries where bilateral trade agreements exists. This is an issue I am sure no one wants to face.

Finally, we want to tell you that POSCO recognizes the importance of the long-term relationship which we have maintained in the past with the United States coal industry and appreciates their contribution in making POSCO what it is today.

Thank you, very much, Mr. Chairman.

[The prepared statement of Mr. Yoo follows:]

POSCO'S COKING COAL REQUIREMENT IN THE PAST & FUTURE

1. Introduction of POSCO
 - A. Pohang Steel Works
 - B. Kwangyang Steel Works
 - C. Central Terminal System
 - D. Overseas Coal Mining Projects
2. POSCO's Coking Coal Requirement
 - A. Present Status And Prospect of Blast Furnace Operation
 - B. Coking Coal Purchase Record And Future Requirement
3. Some Thought on The Role of American Coal in POSCO's Future

By Byung Chang Yoo
General Manager of Washington Office
Pohang Iron & Steel Co., Ltd.

August 5, 1986

My name is Byung Chang Yoo, General Manager of Washington Office of Pohang Iron & Steel Co., Ltd. of South Korea, or "POSCO" for short.

I am here today to present the POSCO'S coking coal requirement in the future. My presentation will cover three important areas of POSCO'S coal demand. The first is a review of the current steelmaking capacity and coal consumption at the Pohang Steel Works, along with a preview of the new POSCO capacity at Kwangyang Steel Works which is presently under construction. Secondly, I will touch the coking coal requirements needed by POSCO for the support of such steelmaking capacities, both in the past and in the future. And finally, I will address the parameters surrounding further sales of American coals into POSCO's buying strategies.

1. Introduction of POSCO

A. Pohang Steel Works

Pohang Iron & Steel Company Limited was incorporated on April 1, 1968 and its first stage of 1.03 million ton crude steel production facility started operation on July 3, 1973. Successfully implementing the subsequent three stages of its expansion programme, the company completed its 8.5 million ton capacity facilities on Feb. 18, 1981. With some modification of existing facilities Pohang Steel Works attained its ultimate goal of 9.1 million ton capacity on May 25, 1983. The actual crude steel production of POSCO increased steadily as each successive expansion project was completed. There has never been a single year in the past 13 years of its operation that the Pohang Steel Works has operated below its capacity.

B. Kwangyang Steel Works

At the present time Korea's per capita crude steel production stands at the low level of less than 0.3 ton. In order to upgrade the industrial structure of Korea to the level of the developed countries, we have to have a minimum steelmaking capacity of 0.5 ton per capita.

In line with that philosophy, POSCO is proceeding with construction of a new steel mill at Kwangyang Bay on the southern coast of Korean Peninsular. The Kwangyang Steel Works' ground breaking ceremony was held on March 5, 1985. Its initial stage of 2.7 million tons of annual crude steel production capacity will be completed at the end of June, 1987. POSCO will embark the second stage expansion at the Kwangyang Steel Works to bring the capacity up by another 2.7 million tons per year. This phase will begin in March, 1987 and be completed by the end of 1988. Any further expansion will depend upon further growth of steel demand.

C. Central Terminal System

Together with the construction of the Kwangyang Steel Works, POSCO has built a Central Terminal System (central bulk cargo redistribution terminal, abbreviated to "CTS") adjacent to the site of the new steel works. It commenced operations April 10, 1986, with an annual throughput capacity of 5 million tons of coal. The company has a plan to expand the redistribution terminal facilities to keep pace with the ever increasing volume of bulk materials, especially coal imported by users other than ourselves. The conception of this project originated from the fact that Kwangyang has a natural deep harbour whereas it would require a huge investment to expand the currently very small facilities at several different locations used by such coal customers as cement manufacturers and power plants.

This terminal will serve as a transshipment base from which coal discharged from vessels of up to 250,000 dwt, will be stored then reloaded into small vessels for the transportation to nearby coal users' ports. In so doing it is possible to achieve a reduction in seaborne freight by avoiding the use of small vessel for long ocean haulage due to limited port facilities. At present this terminal is designed to serve domestic coal users only but we have high hopes that it can be of service to nearby countries importing not only coal but also other bulk materials.

D. Overseas Coal Mining Projects

Korea has limited production of anthracite but unfortunately it is not endowed with any metallurgical coal reserves. Accordingly our coal requirement depends completely upon imports. Therefore, to ensure an uninterrupted supply, long term supply contract arrangements were practiced from the very beginning of our operation. In addition to long term contracts, we have actively participated in overseas coal mine development projects through international cooperation. Now POSCO has three coal mines partly or wholly owned, one each in three major coal exporting countries U.S.A., Australia and Canada. this year these three subsidiaries will supply about 27 percent of our coal requirement.

2. POSCO's Coking Coal Requirement

A. Present Status And Prospect of Blast Furnace Operation

Due to repeated oil price hikes following the 2nd oil crisis in 1979, the Pohang Steel Works have had an all coke operation for each blast furnace since early 1983. The Pohang Steel Works has a coal briquetting facility. Primarily, this facility was introduced to use weak coking coal in coal blending for coke making and thereby enable us to reduce the coke production cost as compared with the traditional method. However, with more emphasis put on stable operation of the blast furnaces with large inner volume this coal briquetting facility is utilized in improving the coke strength without changing the blending ratios of different type of coal.

We are carefully studying the possibility of reopening the oil injection facilities at our blast furnaces as a result of recent big drop in oil prices. We are also considering direct-blending of weak coking coal in coke making. Although these studies will not produce an immediate conclusion resulting in any noticeable change in coal blending methods, we will continue to study any possible way which can reduce costs.

The operation of the blast furnace in the Kwangyang Steel Works will also adopt an all coke operation as at the Pohang Steel Works. A pulverized coal injection facility will be added to improve energy efficiency and therefore we plan to substitute about 7 percent of required coking coal by weak coking coal.

B. Coking Coal Purchase Record And Future Requirement

POSCO's coking coal import in 1985 reached 7.8 million tons representing about an 11 fold increase over that of 1973 when it began initial operation.

POSCO imported 2,038,000 tons of American coking coal valued at \$130 million, or 26 percent of its total annual requirement in 1985. It was comprised of 160,000 tons of low volatile coking coal, 1,200,000 tons of medium volatile coking coal, 410,000 tons of high volatile coking coal and 268,000 tons of petroleum coke.

In 1986 POSCO plans to import about 7.5 million tons in total. We have already achieved our ultimate crude steel production capacity of 9.1 million tons and the coal requirement of the Pohang Steel Works will not show any remarkable change from this level unless a drastic change occurs in the world energy markets. Each stage of the Kwangyang Steel Works will add about 2 million tons to our annual coal requirement reaching 9.6 million tons and 11.6 million tons in 1988 and 1989 respectively. Under the assumption of a 23 - 25 percent contribution from U.S. coal sources for the new steel works, we expect an additional requirement of about 500,000 tons of new U.S. coal for each stage of Kwangyang Steel Works.

3. Some Thought on The Role of American Coal in POSCO's Future

I would like to close my presentation by commenting on three issues with regard to the future import of coking coal from the United States.

First, our biggest concern in purchasing coking coal is price. We hope that U.S. coking coal will become more price competitive on an arrival cost basis. According to 1985 statistics as shown in Table 2, U.S. coking coal price on CIF Pohang base per ton was more than 6 dollars and 11 dollars higher than Canadian and Australian coals respectively. Though we recognize U.S. coal has good quality of low ash and high fluidity, its current price is more than what it should be compared with its competitors'.

We fear this gap will not be narrowed in the near future in view of present restrictions in facilities at U.S. ports and the bigger sized vessels POSCO intends to employ in its raw materials transportation, for example 180,000 tonners and above. We hope that the American Coal Industry and related interests can find a way to improve this disadvantageous infra-

structure problem and also improve the inland transportation system so that American coal is more attractive, especially for the distant customers in Far East.

So long as American coal remains competitive in the international market, we will be able to maintain or even increase the share of U.S. coal in our overall requirements coking coal; otherwise, we have no alternative but to gradually reduce the portion of U.S. coal.

Second, POSCO is entirely dependent upon overseas supply for its coal requirements as I mentioned earlier. Therefore what should be stressed is the importance of a stable and uninterrupted supply of coal. We are fully aware of the fact that the U.S.A. is the best country in the world in terms of coal reserves, total production and the tonnage exported. We also understand the stability and the reliability of U.S. coal supply. We have a high regard for the current smooth and stable labor relationships existing in the industry and hope this trend will continue in the future.

High cost of American coal and stable supply are not POSCO's only concerns. As a developing nation, Korea relies heavily on its trading capability to help its growth and prosperity. Recent trends of growing trade protectionism have us worried. If our coal markets are to remain open to free competition, then we think the same equal free trade should be allowed in the export of our products into the U.S.A. If the current protectionism tendency is realized in the United States, POSCO will inevitably be pressured to diversify its coking coal markets to the countries where bilateral trade agreements exists. This is an issue I am sure no one wants to face.

Finally we want to tell you that POSCO recognizes the importance of the long term relationship which we have maintained in the past with U.S. Coal Industry and appreciates their contribution in making POSCO what it is today.

Thank you very much.

Table 1: POSCO's Purchase Record of Coking Coal by Country

Quantity: in 1,000 WMT
Ratio : in %

Country	1974			1977			1979			1982			1984			1985		
	Q'ty	Ratio		Q'ty	Ratio		Q'ty	Ratio		Q'ty	Ratio		Q'ty	Ratio		Q'ty	Ratio	
U.S.A.	299	32		458	24		897	22		1,462	22		2,072	27		2,038	26	
Australia	600	64		1,121	58		2,279	55		3,596	55		3,239	43		3,204	41	
Canada	33	4		349	18		960	23		1,540	23		2,294	30		2,545	33	
Total	932	100		1,928	100		4,136	100		6,598	100		7,605	100		7,787	100	

Table 2: The Comparison of The Delivered Cost of Coking Coal to Korea by Exporter

(Unit: U\$/MMT)

Country Year	U.S.A. (A)	Canada (B)	Australia (C)	Comparison	
				A - B	A - C
1981	85.45	64.71	70.79	20.74	14.66
1982	83.80	73.02	71.34	10.78	12.46
1983	71.95	69.85	62.19	2.10	9.76
1984	66.97	60.90	55.62	6.60	11.88

Senator WARNER. Thank you. Are there any members of the panel who wish to supplement their oral remarks, over and above what is contained in their written statement?

[No response.]

Senator WARNER. If not, then this hearing is adjourned, and I thank each and every one of you for your contribution.

[Whereupon, at 12 noon, the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

8/19/86

QUESTIONS SUBMITTED FOR THE RECORD BY SENATOR J. BENNETT JOHNSTON

Questions for Panel II

- (1) Japan is the world's leading importer of coal. However, U.S. coal exports to Asia have experienced a rapid decline in market share during the period 1980 to 1984.
 - Specifically, what steps do you think should be taken to bolster U.S. exports to Japan?
- (2) Do you think that the plummeting of oil prices is going to have a negative impact on U.S. coal exports?
- (3) I understand that employment in U.S. coal mines reached a peak of approximately 250,000 workers in 1979 but has declined to only about 153,000 in 1985.
 - What accounts for this decrease in employment?
 - What steps can be taken to bolster employment in our coal mines?
 - How does worker productivity in U.S. coal mines compare with productivity of workers in the other leading coal exporting countries?
 - What causes the differences?
 - What impact do sagging exports have on mining-related employment?
- (4) Where do you rank transportation costs as a factor affecting the competitiveness of U.S. coal?

- What steps do you think should be taken to reduce the transportation costs for U.S. coal?
 - Do you think that coal slurry pipelines could provide additional competition, helping to decrease internal transportation costs?
- (5) What improvements, if any, need to be undertaken at our ports in order to maintain the competitiveness of U.S. coal?
- (6) What effect, if any, do you think that the Clean Coal Technology Program will have on the competitiveness of U.S. coal?

Additional Question for Mr. McGlothlin

(1) In your testimony, you state, "[t]he coal industry, as well as the National Academy of Sciences, has identified a number of environmental requirements that go beyond 'good engineering practice' and as such add considerable costs which are unnecessary."

- Specifically what environmental requirements are you referring to? Do you believe these requirements should be eliminated?

Additional Question for Mr. Altmeyer

(1) Your testimony states that "The effort to make U.S. coal more price competitive must include a review and scrutiny from a cost-effectiveness standpoint of existing and future environmental requirements," and you specifically mention the highwall elimination and approximate contour requirements.

- Specifically what other existing environmental requirements do you think need to be reviewed and modified?

Question for Mr. Buckner

(1) I understand that employment in U.S. coal mines reached a peak of approximately 250,000 workers in 1979 but has declined to only about 153,000 in 1985.

- What accounts for this decrease in employment?
- What steps can be taken to bolster employment in our coal mines?
- How does worker productivity in U.S. coal mines compare with productivity of workers in the other leading coal exporting countries?
- What causes the differences?
- What impact do sagging exports have on mining-related employment?

Questions for Mr. Dempsey & Mr. Bales

- (1) Where do you rank transportation costs as a factor affecting the competitiveness of U.S. coal?
 - What steps do you think should be taken to reduce the transportation costs for U.S. coal?
 - Do you think that coal slurry pipelines could provide additional competition, helping to decrease internal transportation costs?
- (2) What improvements, if any, need to be undertaken at our ports in order to maintain the competitiveness of U.S. coal?

rec. 2/26/87

September 18, 1986

The Hon. John W. Warner
United States Senate
Washington, D. C. 20510

Dear Senator Warner:

I am in receipt of your letter of September 2, 1986, enclosing a questionnaire concerning my address to the Subcommittee on Energy and Natural Resources on August 5, 1986; and herewith enclosed are my answers.

I hope they will be helpful; and if I can be of any further assistance, please feel free to call upon me.

Very truly yours,

James W. McGlothlin
President
United Coal Company

JW:al
Enclosure

Questions for Panel II

1. U. S.'s exported coal to Japan has rapidly declined from approximately 25,000,000 tons in 1981 to around 10,000,000 tons for 1986; and this represents a considerable problem to the American coal industry and to the Virginia coal industry in particular. Virginia coal is of the exact quality most desired by the Japanese steel mills; and a decline of some 15,000,000 tons in importation by the Japanese mills has basically come from the Virginia coal mining industry and has caused great economic difficulty, particularly with Virginia exporters of high quality metallurgical coal.

I believe the United States trade representative should reduce Japan's quota for exporting steel into this country in the same amount or proportionate to that of the Japanese coal reductions of imported American coal to Japan. There is great basis for this situation in that some of our trading partners, Brazil in particular, have continued to import more and more U. S. coal and is looked on favorably as a trading partner, particularly in allowing Brazil to export more and more steel to this country. Since steel is a direct product of coal, there is good reason for taking this step; and I believe it is reasonable and logical and could easily be understood by the Japanese.

No doubt, if this threat were made to the Japanese, they would immediately respond to this type of thinking by beginning to reconsider their coal importation policies.

2. Falling oil prices have already had a tremendous negative impact on U. S. coal exports. We can no longer export coal to many of our European customers because they are able to buy cheaper fuel oil to replace coal in steam generating plants. As a matter of fact, many East Coast U. S. utilities are beginning to burn imported fuel rather than American coal. This is particularly true at Public Service of New Jersey, Montauk Electric of Long Island, New York, and New England of Boston, Massachusetts.

3a. U. S. coal mining employment is now decreased from 250,000 workers in 1979 to 153,000 workers today because of the following: (a) greater productivity caused by labor peace in the coal mines of America and (b) a change in type of mining from underground mining to longwall mining and surface mining.

3b. Employment in the U. S. coal mines could only be increased if we become more competitive worldwide, allowing for greater production of coal. This market viability can be achieved only if our price is allowed to become competitive. In my opinion, the easiest way to achieve this goal is to relax American environmental standards, particularly under the Surface Mine Control and Reclamation Act, which would reduce costs and make us more competitive.

3c. I believe worker productivity in U. S. coal mines compares favorably with worker productivity in other leading coal exporting countries.

3d. N/A

3e. Sagging exports have caused great layoffs in the mining industry, a deterioration in opening of new mines, and great difficulties for coal mining communities and those related families who are unemployed because of this problem.

4. Transportation is now the largest single cost in coal mining followed by the environmental cost of compliance with the Surface Mine Control and Reclamation Act.

4a. I believe all railroads should be regulated under the Interstate Commerce Commission and should be given a reasonable profit after careful scrutiny of their costs.

4b. Coal slurry pipelines could definitely improve transportation costs and would provide a competitive alternative to railroads. Currently, many railroads have captive shippers who can find no other transportation means for their coal; and without competition, we will see little, if any, improvement in rail transportation costs.

5. Our ports are currently competitive, and I believe little needs to be done to improve them. Dredging of Hampton Roads will add some improvement, but the improvement and efficiency will be minimal.

6. I believe clean coal technology will have little impact on competitiveness of U. S. coal.

Additional Questions for Mr. McGlothlin

1. We currently are saddled with a bureaucracy controlled by the Office of Surface Mining as well as various State Department of Mines, which control environmental procedures at coal mines; and both of these agencies now go far beyond those control procedures originally adapted by Congress in the Surface Mine Control and Reclamation Act. OSM inspectors are still writing violations and closure orders in states such as Virginia where primacy has been adopted and approved, and coal mines who have complied with state rules and regulations are still subject to violations and closure orders by OSM for the same factual situations sometimes even after they have been adjudicated in courts of law in states in which the mining is occurring. This burdensome bureaucracy is stifling mining and prevents operators from knowing where they stand and how to deal with any individual problem. Operators should not have to deal with OSM in a state that has primacy, and OSM's only relationship should be between the state governing body and OSM and not the operators.

I believe environmental requirements to totally wipe out highwalls which are cosmetic problems only have added significant costs to mining. This type of required cosmetic cure is expensive and burdensome for coal operators and yet yields no good environmental results.

Today's bureaucracy requires a coal operator to spend hundreds of thousands of dollars to obtain a permit even though most of the information required and the time-consuming burden of acquiring this permit has little to do with the environmental protection desired by the Act.



ASSOCIATION
OF AMERICAN
RAILROADS

William H. Dempsey
President

October 21, 1986

Rec.
2/25/87

The Honorable John W. Warner
Chairman, Subcommittee on Natural
Resource Development and Protection
Washington, DC 20510

Dear Chairman Warner:

In your letter of September 2 you posed two questions in follow-up to my recent testimony before the Subcommittee on Natural Resource Development and Protection concerning the prospects for exporting American coal. Your questions and my responses follow:

Question (1): Where do you rank transportation costs as a factor affecting the competitiveness of U.S. Coal?

As an element in the coal export chain, transportation does impact on the cost of U.S. coal to foreign buyers. However, I do not believe that transportation costs, particularly rail costs, are a significant factor adversely affecting the competitiveness of U.S. coal.

Factors such as the value of the dollar relative to the currencies of our chief competitors in the export market, the policies of other nations affecting supply and demand of coal, and the cost of production of U.S. coal all have a more significant effect on the competitiveness of U.S. coal than do transportation costs. In fact as I pointed out in my testimony, a 1985 Department of Energy Study indicated that even if U.S. rail and port charges were reduced to zero, the cost of South African coal in Europe and Asia, and Australian coal in Asia would be less than the delivered price of deep mined coal from Appalachia.

Question (1)(a): What steps do you think should be taken to reduce the transportation costs for U.S. coal?

My response to the first part of this question is not meant to imply that efforts to reduce transportation costs cannot have a positive effect on the competitiveness of U.S. coal. Deregulation

Chairman Warner
October 21, 1986
Page Two

brought about by the Staggers Act has given railroads the ability to be more responsive to market forces and has had a salutary effect on coal rates. The freedom afforded by deregulation has lead to an increase in competitively negotiated contracts for coal transport. The railroads intend to continue in these efforts. Certainly one step that should not be taken is a reintroduction of regulatory restraints on the rail industry.

As my testimony explained, railroads are increasing their investments in equipment aimed at improving coal transportation and reducing its costs. In addition, efforts aimed at increasing productivity are being made, which, to be successful, will require the cooperation of rail labor. Our nation's laws and policies should maintain and further facilitate an environment which is conducive to these efforts.

Question (1)(b): Do you think that coal slurry pipelines could provide additional competition, helping to decrease internal transportation costs?

I do not believe that coal slurry pipelines would have a positive effect on the competitiveness of U.S. coal. First, experience tells us that the cost of constructing a pipeline will exceed the promotional estimates. Thus there is little assurance that coal slurry will result in competitive transportation rates.

Second, pipelines do not provide the flexibility needed to respond to changing supply and demand in the energy market. The success of coal slurry is very much dependent on the stability of mine origins, volume transported and transportation distance. The export coal market is marked by wide fluctuations in demand, not stability.

Third, the nature of the investment required for coal slurry pipelines usually necessitates the signing of long-term contracts. While the introduction of a pipeline might have an initial effect on competition, once long term contractual commitments are in place, the pipeline will not be in a position to add to competition. Long-term contracts also pose the danger of locking in assumptions about inflation, technology and energy needs which may prove faulty.

Question (2): What improvements, if any, need to be undertaken at our ports in order to maintain the competitiveness of U.S. coal?

In the long run it will be important for U.S. coal exporters to be able to fully load large ocean vessels. The lack of deepwater ports in the United States currently impedes this

Chairman Warner
October 21, 1986
Page Three

ability. Consideration should be given to dredging ports which are involved in coal exports. In the absence of dredging, "topping-off" operations -- the loading of deepwater vessels at port and then steaming them to a mooring site where the loading can be completed from barges -- should be encouraged.

I appreciate this opportunity to present the views of the AAR on the matter of coal exports and will be pleased to provide any additional information that you or the Subcommittee might desire.

Sincerely,

N. W. Simpson



**NORFOLK
SOUTHERN**

Norfolk Southern Corporation
204 South Jefferson Street
Roanoke, Virginia 24042-0070
703 985-6738
Easylink No. 62856936
Telex No. 324188

William B. Bales
Vice President
Coal and Ore Traffic

October 6, 1986 C

200-91

The Honorable John W. Warner
United States Senate
Committee on Energy and
Natural Resources
Washington, D. C. 20510

Dear Senator Warner:

This refers to your September 2, 1986 letter enclosing further questions relating to my recent testimony before the Subcommittee on Natural Resources Development and Production.

In response to your request, enclosed are the answers to the further questions. If we can provide additional information, please advise.

Very truly yours,

W. B. BALES

Enclosure

cc: Mr. William H. Dempsey
President & CEO
Association of American Railroads
50 F Street, NW
Washington, DC 20001



Question (1): Where do you rank transportation costs as a factor affecting the competitiveness of U.S. coal?

As the question itself implies, transportation costs are but one of many elements comprising the delivered cost of U.S. coal abroad. And the cost of rail transportation is but one element of total transportation costs.

The price at which coal sells in international markets is determined in large part by governmental decisions over which neither U.S. producers nor U.S. carriers have much control. For instance, governments of such nations as Poland, South Africa and Australia determine the quantity of coal they will produce, and those charged at the national level to plan and coordinate coal purchases for utilities and other large consumers determine how much they will purchase -- and at what price, from what sources. In economic terms, these realities mean that the United States is a marginal supplier of coal in international markets.

Of course, U.S. coal would not participate in these markets at all if it could not be delivered at a price that is within the range which large foreign buyers have decided they will pay. However, our coal is in demand also because of its high, uniform quality, the reliability of its supply, and the assurance that it will move from mine to port efficiently and on time.

To assure that U.S. coal remained attractive overseas, Norfolk Southern has not increased its tariff rates on export coal to Lamberts Point, Virginia since January 1, 1982 -- even

though it has been permissible to take a number of rate increases in the interim. And Norfolk Southern's export transportation contract rates (at which most export coal moves) actually are lower than they were in January of 1982. Moreover, the minehead price of export coal has shown considerably more volatility than have rail transportation rates, whether tariff or contract.

Norfolk Southern will continue to make export coal rate decisions with sensitivity to their possible effect on the United States' share of that market.

Question (1)(a): What steps do think should be taken to reduce the transportation costs for U.S. coal?

As a general principle, Norfolk Southern believes that market forces should be allowed to set prices and that rail carriers -- as all other links in the distribution chain now are able to do -- should be free to respond quickly and imaginatively to changes in market conditions and to provide that combination of services and rates best suited to the needs of each receiver and transshipper with whom such carriers deal.

For our part, within existing regulatory limitations, Norfolk Southern has worked hard to keep rail transportation rates in line and will continue to keep them as low as is consistent with maintaining its ability to provide first-class rail service to shippers of coal and other commodities.

- 3 -

In addition, Norfolk Southern proposed several years ago to initiate a coal topping-off service, both as an interim measure and as a complement to later port dredging which, as is noted in response to Question 2, we support.

Under the plan, supercolliers would be loaded to the channel capacity of a given U.S. port and then proceed to a naturally protected deepwater anchorage in the Delaware Bay where one or more self-discharging barges would load them to capacity. To date, local and state opposition has prevented Norfolk Southern's providing this service, even though it has the support of agencies of the Federal Government, coal suppliers, and others.

Question 1(b): Do you think that coal slurry pipelines could provide additional competition, helping to decrease internal transportation costs?

It is not likely that pipelines will decrease the cost of transporting coal to Lamberts Point or make U.S. coal more attractive in international markets.

The economics of coal slurry pipelines are very much a function of four factors: (1) concentration, (2) quality and volume, (3) distance, and (4) existing means of transportation.

Concentration. This refers to how many origins and destinations a pipeline serves. The export coal NS moves today comes from hundreds of origin mines, many small, and scattered

throughout the three-state service area of the coalfields in Virginia, West Virginia and Eastern Kentucky. The expense of gathering coal from such diverse producers and of preparing and feeding it into a single pipeline would dissipate quickly the economic advantage that proponents allege pipelines enjoy.

Quality and Volume. As much as 85-95% of export coal moving over NS to Hampton Roads is metallurgical. Shippers and customers are very exacting about its quality and specifications. Possible degradation problems resulting from commingling various coals in a slurry line, and/or from their long immersion in water, must be resolved before it could be determined whether a sufficient volume of coal might be available to ensure economical slurry pipeline operation. Too, export volumes are subject to vast fluctuations, and a pipeline requires fairly regular volume. Therefore, operators might encounter difficulty securing sufficient long-term commitments to ensure a stable and adequate volume level.

Distance. This refers to the general rule that the shorter the slurry line, the higher the volume necessary for economical operation. Given the distance from the Central Appalachian coalfields to the East Coast (between 350-400 miles) an annual throughput of 15-20 million tons would be necessary for a minimally acceptable operation. This volume and distance relationship is critical and may not be satisfied by a pipeline crossing Virginia.

Existing Means of Transportation. The Black Mesa Pipeline, the only operating coal slurry pipeline in the U.S., covers a route where, because of topography, no rail line existed and or could have been built without considerable circuitry. Where a railroad is already in place, however, it is much more difficult to justify constructing a slurry pipeline.

In all likelihood, that rail line is not used to full capacity, and its capital cost has been recovered; a pipeline, on the other hand, would create new (and surplus) capacity at today's financing rates. Moreover, the entire capital commitment for a pipeline needs to be made at once and at the outset. If additional capacity were in fact required, an existing railroad could supply it by upgrading its system to the extend demand warranted. The capital component of the railroad's cost would, therefore, likely be well below that of the investment in an all-new slurry pipeline.

Question (2): What improvements, if any, need to be undertaken at our ports in order to maintain the competitiveness of U.S. coal?

It would be helpful if the channels at principal domestic ports engaged in export trade are dredged so that they can accommodate supercolliers that are fully loaded. Such colliers are more economical to operate than smaller vessels, and their use should make possible reductions in the delivered price of U.S coal abroad.

APPENDIX II

Additional Statements Submitted for the Record

TESTIMONY OF

CAPTAIN PETER NORWOOD, DIRECTOR OF MARINE DEPARTMENT
PORT OF PORTLAND, P.O. BOX 3529, PORTLAND, OREGON 97208

BEFORE

U.S. SENATE SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT AND PRODUCTION

WASHINGTON, D.C.

August 5
~~1985-86~~, 1986

(HEARING ON PROSPECTS FOR EXPORT OF AMERICAN COAL)

TESTIMONY OF
CAPTAIN PETER NORWOOD, DIRECTOR OF MARINE DEPARTMENT
PORT OF PORTLAND, P.O. BOX 3529, PORTLAND, OREGON 97208
BEFORE
U.S. SENATE SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT AND PRODUCTION
WASHINGTON, D.C.

August 5
~~JUNE 24, 1986~~

I am Captain Peter Norwood, Director of the Port of Portland's Marine Department. The Marine Department operates the Port's shipping facilities for containers, bulks, automobiles and other products, as well as leasing facilities to third parties for the shipment of grain and other special commodities.

From a West Coast perspective, the overriding question facing coal exports is whether or not U.S. western steam coal will become a major factor in the export trade. It is worthwhile to note that our perspective is somewhat narrow, focusing primarily on U.S. steam coal from Montana, Wyoming, Colorado and Utah for export to the Pacific Rim market. Will U.S. western coal become part of the steam coal that our Pacific Rim trading partners are importing annually, at a growing rate that is today still predicted to double over the next ten years? Are western mines, transport companies and shippers going to actively pursue coal export markets? And perhaps, more importantly, is the U.S. government prepared and willing to commit the resources and adopt a stance necessary for western U.S. steam coal to successfully compete in the Pacific Rim coal market? As we watch the involvement of the governments of competing nations that are currently active in coal exports to Asian markets, we feel that a strong role by our federal government could be significant in developing and promoting the export of U.S. western coal.

The Port of Portland has a very direct interest in the answers to these questions. More than ninety acres of Port waterfront land has been leased for development of a coal export facility, capable of handling 12 million tons of coal annually. Further, the facility is 85 percent complete, and construction has been idled for a while. The Port of Portland is now seeking a resolution for this unfinished terminal, and is currently on a short time frame to determine if coal exports can become a reality and to obtain commitments from investors to complete the remainder of the facility. Our facility, once completed, could offer some real advantages to the marketing of U.S. western steam coal, serving as a tool to aid in the development and expansion of Asian steam coal markets. If completed, the Portland facility could help the competitive position of a large number of western coal mines in the export market. Although we need to reach a decision soon to return to productive use the land on which the Portland coal facility sits, this issue is larger than just Portland.

During the last three months, we've made presentations to approximately 85 international companies, both in the U.S. and overseas. We've talked to coal suppliers, producers, trading companies, coal consumers, financial institutions and transportation companies. Those discussions have confirmed the view that Pacific Rim coal demands are still expected

to double from 36 million tons to 87 million tons per year in the coming ten to fifteen years. Construction is underway and additional plans are being developed for new coal-fueled plants or major expansions in Japan, Korea, Taiwan and Hong Kong. Contrary to a perception held by some that no steam coal is being consumed in the Pacific Rim, it is. It's just not U.S. western steam coal.

Our discussions have pointed out some of the issues inhibiting commitments to purchases of U.S. steam coal, including worldwide coal supply availability, delays of several years on negotiations of new coal contracts, concern over fluctuation in oil prices, the slump in ocean freight transportation, and the strength of competing countries' currencies.

Why is Portland involved in coal exports? Our principle objective continues to be to find a solution to completing the Portland facility for the handling of coal and participating in the anticipated long-term shipments of western U.S. steam coal to Pacific Rim consumers. If completed, the Portland facility could be an excellent funnel for western U.S. steam coal to Asian coal markets. The Portland facility could provide the kind of direct transportation link from mine to port that could make coal exports a reality.

Before proceeding further, however, it may be helpful to provide some background on the Port of Portland and how we became involved in the Portland coal facility. The Port is a municipal corporation of the State of Oregon, created to promote and provide for the maritime, aviation, industrial and commercial interests of the Portland metropolitan area and the State of Oregon. As such, we own and operate five marine terminals, one international and three general aviation airports, a major ship repair facility and commercial and industrial real estate near our marine and airport facilities.

Portland Coal Facility

In the late 1970s, with world oil prices climbing, more and more energy users looked to different energy sources. Many looked to coal. In 1980, dozens of vessels were lined up waiting in every major coal port in the United States. Existing export facilities were inadequate to meet the demand. Heavy pressure was placed on the ports by coal buyers to increase U.S. port capacity. The Port of Portland itself received visits almost weekly from Japanese and Korean purchasers and U.S. mine owners pointing out the need for additional capacity and more efficient loading facilities to provide access to the vast resources of U.S. western coal reserves. Many potential sites in various West Coast ports in Oregon, Washington and California were suggested, but Portland was the only one to be developed beyond the planning stages.

Portland was chosen as the western site for coal terminal development because of several factors. One was that there was a large site ready to develop with all permits in hand. Another was that there existed excellent service from three railroads. A third was that Portland's deep water port offered the geographic inland advantage of being 100 miles closer to coal fields than coastal ports. It would be the only modern coal terminal designed to serve the large reserves of coal in the Rocky Mountain States. If the vast reserves of coal in Wyoming, Northern Utah and Montana are going to be exported to Asia, the logical

way for it to move is through Portland. In 1982, construction started on the Portland Coal Export Terminal by a group of private developers. But when the facility was 85 percent complete, the company lost its financing, construction stopped, and the project eventually went into receivership.

After several years of litigation the Port felt it should become directly involved in seeking a solution. In an attempt to resolve the issue and move the project forward, the Port of Portland negotiated an option agreement with all parties. This option was recently approved by Multnomah County Circuit Court, and accomplishes four things:

1. It allows the Port 180 days to seek a solution for future use of the site.
2. It gives the Port or its assignee the option to purchase the partially completed facility for a fixed price of \$6.3 million.
3. It terminates all pending litigation upon payment of the option price.
4. It provides for a contract to complete the facility as originally designed for a fixed price.

As mentioned before, the decision on the future of Portland's coal facility depends, in part, on the long-term outlook for the export of coal. With an 85 percent complete facility, we need to know whether or not the U.S. is going to export western steam coal. The question of the future of U.S. coal exports, we feel, involves the position of the federal government on this issue. The governments of Australia, Canada and China --the nations that are now exporting coal to Asian markets-- have taken a stand. These nations strongly support their coal export industries in maintaining and trying to increase their share of this market. We question what role U.S. western coal is going to play in the long run. If we are going to become aggressive about shipping coal, then we are going to need a facility such as the one nearly completed in Portland. Whether the federal government intends to promote growth in the western steam coal market is critical to our decision making.

To make western coal competitive in world markets, there needs to be a concerted effort on the part of the major energy industries and government. Completion of the Portland coal terminal is a prime opportunity for a private investor in the energy industry. The investment required is minimal. Yet the opportunity will not last forever and will be impossible to duplicate in the future.

During the 180-day period which was initiated on March 20th, the Port began actively seeking a buyer to purchase, complete and operate the facility. As part of the marketing for the facility, Port staff conducted an assessment of the Pacific Rim coal market. We are in no way experts in the coal industry. However, in our Asian market assessment, we visited with the major steam coal purchasers, governments and financial institutions. In addition, we attended recent Pacific Rim coal conferences in Hong Kong, Tokyo and Korea. I would like to share some basic findings about the potential for U.S. steam coal exports learned from those contacts. There seems to be general consensus on two

major issues:

1. Demand is generally expanding in these countries and is expected to continue to expand.
2. If competitively priced, U.S. Western coal could fill part of this demand.

Pacific Rim Demand

Looking back at 1980 and 1981, we see that the volume of steam coal imports by Asian nations has actually grown. The difference today is the source of supply for steam coal. In the early '80s, most of the industry expected the U.S. to play a substantial role in supplying coal to the Far East. Instead, Australian and South African steam coal is being imported. Rather than the bottom falling out of the market, it is the U.S. role in that export market that has shifted dramatically. And the future demand projections, while not as ambitious as those made back in 1980, still show growth.

A variety of sources predict that Pacific Rim demand for steam coal is generally expanding.

- o Japan, Taiwan, South Korea and Hong Kong will be major importers of steam coal in the future.
- o Japan is the world's largest importer of steam coal.
- o The Japanese electric utility companies, the largest steam-coal consuming market in Japan, has the greatest share of its demand served by long-term contracts until the early 1990s.

Despite the fact that the Japanese energy diversion policy of the late 1970s is still in place, we do not see the U.S. playing much of a role in the short-range steam coal supply. This is due to existing long-term coal contracts that will fulfill a major portion of the demand. However, there can be opportunities developed for the future if major industry efforts can be focused now.

We did not attempt to generate our own estimates of future coal consumption. Instead, our conclusions are based upon recent demand assessments done by others, including Japanese consuming industries.

In Japan alone, steam coal imports have shown a steady increase, as the figures below demonstrate.

Steam Coal Imports
(thousands of metric tons)

<u>1975</u>	<u>1980</u>	<u>1985</u>
383	7,234	20,491

(Source: Japanese Ministry report)

Presently, Asian demand for imported steam coal is between 35 and 40 million metric tons. By 1995, various industry sources estimate demand

will range from 80 to 100 million metric tons.

This has been a difficult time to be talking about coal, with world oil prices falling. But we believe that increased demand for steam coal will continue despite fluctuating crude oil prices, as there is already a substantial investment in coal-fired facilities in Asia. The unpredictability of oil prices is a major deterrent to future expansion of this energy source. Nuclear energy plays a growing role as an energy source, but its development is slowed by relatively high capital construction costs, changing emphasis on environmental requirements, and safety issues. Liquefied natural gas is also receiving growing acceptance as a primary energy source despite its slightly higher transport costs.

Similar circumstances exist in other Asian countries as well. In Taiwan, nuclear power generation is an attractive alternative, but coal will remain of extreme importance, as most facilities have already been converted from oil to coal-fired. Coal represents approximately 24 percent of the total energy-generating supply. This is expected to grow to 42 percent by 1995. And in Korea, it is generally felt that by 1990 steam coal imports will be approximately 8.4 million tons, and approximately 15.0 million tons by 1995.

Supply to the Pacific Rim

World coal production is currently approximately 3.2 billion metric tons annually. The United States itself produced 886 million tons of coal in 1985, and exported 93 million of them. This is about 10 percent of our total production. By way of comparison, Australia, currently the largest steam coal supplier to Japan, and Canada export roughly half of their coal production.

While the United States exports respectable quantities of metallurgical coal to Asian nations, this country has not garnered much of the Asian market for steam coal. In 1984, almost 21 percent of Japan's metallurgical coal imports come from the United States, but less than three percent of its steam coal imports came from the U.S.

The major steam coal supplier currently is Australia, which supplied some 65 percent of Japan's imports of steam coal in 1985. Despite the fact that Japan has invested in coal facilities in Australia, our sources indicate that Japan would like to diversify its suppliers. And while its sources for metallurgical coal are more evenly spread across several supplying countries, steam coal and metallurgical coal are not easily substitutable. Japan, therefore, seeks to diversify its steam coal supply as well.

In 1985, the U.S. exported over 31 million tons of steam coal, about a third of its total coal exports. Of this, approximately half went to Europe, less than a third went to Canada, and 5.4 million tons, or roughly 17 percent, went to Asia. The majority of this moved from eastern and gulf ports. Less than 1.2 million tons of steam coal moved out of the western region through West Coast ports, including Alaska.

Role of Western Coal

The business of exporting Western steam coal to Asian markets is in its

infancy. While the present time does not appear to be the best of times to make advances in this area, our sources indicate that there is long-run potential to compete in this market. The geographic proximity of the U.S. West Coast to Asian nations and the proximity to the huge reserves of steam coal in the Rocky Mountains are two factors. And given potential reductions in the total cost of U.S. Western coal from minehead to its being loaded onboard vessel in Portland, we could provide an attractive alternative.

Impediments to Western Coal Exports

While we believe that the demand for steam coal is generally expanding, U.S. coal tends to be less competitive. The main reason for this is price: it costs more, using current practices, by the time it's delivered to the Asian user.

Currently ocean freight rates are at historically low levels, providing limited differentials between port loading facilities and foreign destinations. This trend is abnormal. We believe that it will again return to become a significant factor in the total cost of delivered coal.

But for the time being, let us turn our attention to the non-seaborn portion of the cost of coal: from mine to overland transportation (i.e. rail rates) and to port handling charges. A few months ago, our sources indicated roughly a \$10 per metric ton difference between U.S. western coal and Australian coal. While this amount fluctuates, if you compare the overland distances from mine to port in both of these cases, distances from the mines in Colorado and Utah are approximately three times greater than the distances Australian coal must travel. This places an extreme burden on U.S. western coal suppliers to compete in a price-sensitive market. We heard from various purchasers that this transportation factor of U.S. western coal will be a major hurdle for the U.S. to overcome.

Another impediment to the export of all U.S. coal is the valuation of the U.S. dollar compared to foreign currencies. Starting in late 1982, currencies of countries that export coal to Asia fell dramatically against the U.S. dollar. While there is little we can do about this directly, it is a significant factor in the marketplace today.

These are only a few of the market impediments which are having a negative impact upon the ability of U.S. western coal to compete in the Pacific Rim market.

The Portland coal facility was designed to reduce costs for both the rail carrier in utilizing the ultra-modern, fast-loading facility and in the handling of the coal at the terminal itself. These facility benefits can assist the suppliers/exporters of U.S. western steam coal through:

1. Opportunities for lower rail transportation costs due to:
 - o High speed railcar unloading equipment.
 - o Rail loop track efficiencies.
 - o Ground storage capabilities.
2. Low terminal transfer costs due to state-of-the-art terminal

design even at minimum annual volumes.

3. Competitive shiploading costs associated with rapid vessel turnaround and competitive ocean transportation charges.

Conclusion

U.S. western steam coal is not going to be the lowest priced steam coal on the world market. But it does offer a secure, stable supply. From the supplier side, the U.S. needs to continue working to reduce the price differential that currently exists between U.S. western steam coal and alternate sources of steam coal (Australian and South African). The mine owners and operators, the railroads and terminal operators need to make a commitment to pursue this export opportunity, working together to reduce costs and prices.

The U.S. government also needs to define its appropriate role. If the federal policy is to promote exports, and if it looks to coal as a promising commodity to help reduce the trade deficit, then a change needs to occur. It cannot be one of simply offering encouragement to the private sector to "be competitive" --the federal government needs to commit vital resources and examine how other foreign governments have been successful in marketing and securing beneficial contracts for coal exports from the coal-consuming Pacific Rim countries.

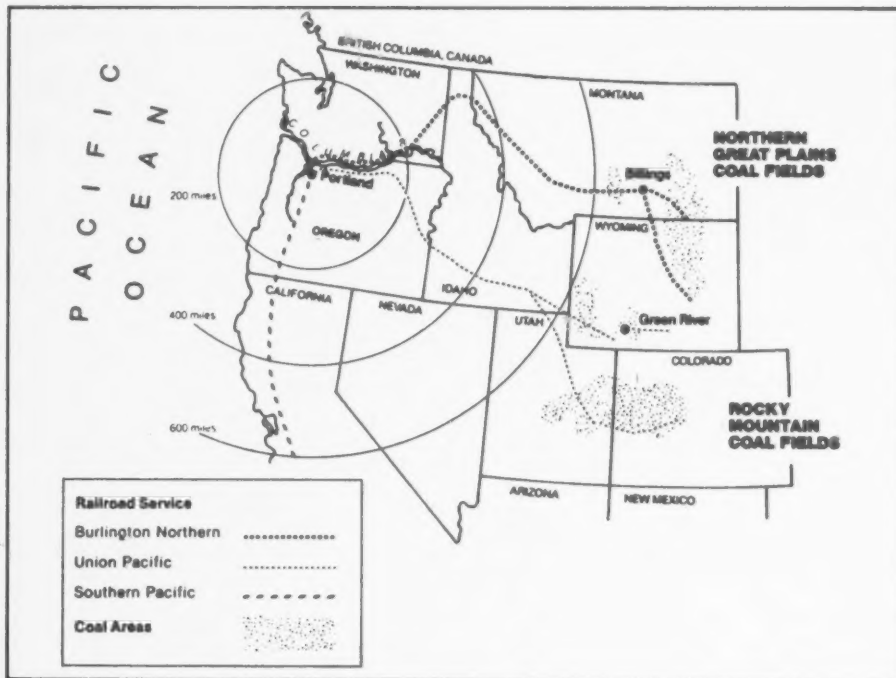
Coal is a commodity that offers our Asian trading partners an immediate opportunity to reduce their trade surplus with the U.S. They should be encouraged to use the valuable trade channels that already exist to quickly respond to their diversification goals.

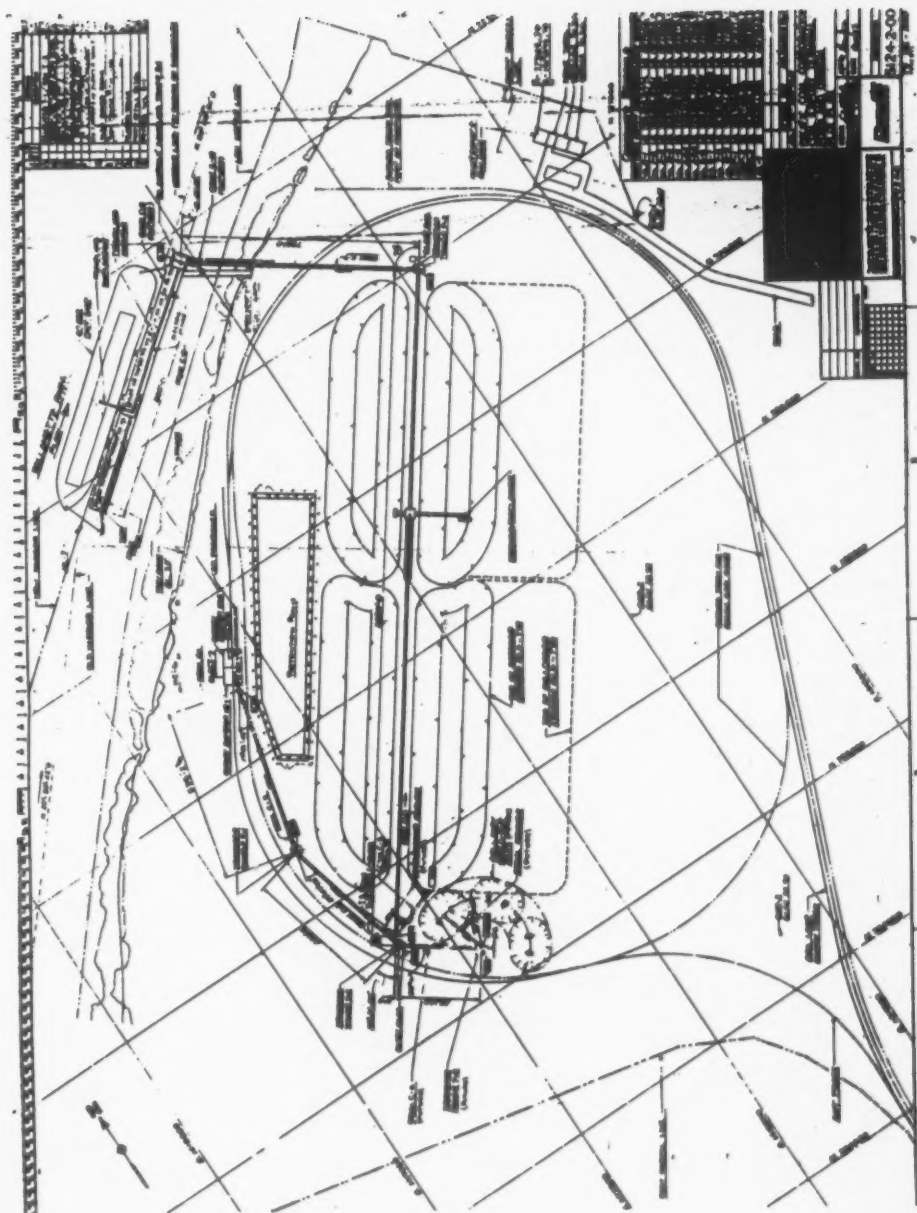
Secondly, some thought should be given to what policies the federal government could adopt that would encourage a lower delivered price for coal by collective actions of the mines, railroads and coal terminals. In addition, consideration should be given to what role could be played in encouraging the development of technological advances that are needed to make lower-grade steam coal, available in large reserves in the West, competitive on a worldwide basis.

Finally, immediate action could be taken by the U.S. government in exerting pressure on individual Pacific Rim countries to execute additional coal purchase contracts now which would serve not only to expand U.S. coal into the market but also would create the prospect of reducing our trade deficit.

Thank you for the opportunity to present testimony today.

Proximity of Portland Coal Facility to Western Steam Coal Reserves





STATEMENT OF WILSON BRANCO
SIDERURGIA BRASILEIRA S.A. (SIDERBRAS)
BEFORE THE
SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT AND PRODUCTION
COMMITTEE ON ENERGY AND NATURAL RESOURCES
U.S. SENATE

August 5
~~June 26~~, 1986

My name is Wilson Branco. I am U.S. representative of Siderurgia Brasileira S.A. (Siderbras), the Brazilian state owned steel company. My primary responsibility in the U.S. for the past 4-1/2 years has been to coordinate the coal purchases of the Siderbras System in the United States and Canada. I appreciate the opportunity to provide the Subcommittee with our perspective on U.S. coal exports.

1. The Brazilian Steel Industry

Although steel has been produced in Brazil for over 50 years, the present Brazilian steel industry was built largely over the past two decades, with the majority of its capacity coming on line since the early 1970's. The Brazilian steel industry employs approximately 140,000 workers at a cost of \$4.00 per hour (including benefits) or roughly one-sixth of the cost of American steel workers and about one-third of the cost of steelworkers in Germany and Japan. The industry relies primarily on domestic raw materials for its production, with the exception of coking or metallurgical coal, which is imported from a variety of countries including the United States. The industry's access to low cost skilled labor,

abundant domestic raw material sources and one of the most modern physical plants in the world, built largely in the past decade, has provided it with the ability to compete internationally with major steel producing countries.

Between 1972 and 1985 raw steel output in Brazil rose from 6.5 million tons to 20.4 million tons.^{1/} The expansion of the Brazilian industry was primarily a response to the unprecedented growth of the Brazilian economy in the 1970's and the potential growth evident from the low per capita rates of steel consumption in Brazil, 97 kg. or 214 lb in 1985.

Raw steel production in 1985 by type of ironmaking process was as follows:

	Quantity (Million Tons)	Percent
Coke based	12.6	61.5%
Charcoal based	3.4	16.5
Electric furnace	<u>4.4</u>	<u>22.0</u>
Total	20.4	100.0%

The private sector includes 32 firms, none of which rely on coking coal for raw steel production. The state-owned sector, Siderbras, relies primarily on coking coal in its raw steel production. Of total 1985 production of 20.4 million tons, Siderbras companies produced 13.2 million tons.

^{1/} Unless otherwise stated, all figures in this paper are expressed in metric tons (1 metric ton = 1.1023 short tons).

The severe internal recession in Brazil beginning in 1981 interrupted a pattern of sustained growth in domestic steel consumption. As a result, by 1985 Brazil, which had been a net importer of steel as recently as 1978, was exporting 7.0 million tons of steel products and 2.3 million tons of pig iron, valued at \$2.0 billion.

2. The Siderbras Group

Siderbras is the state-owned holding company for the federal government's interests in the steel sector. Siderbras, established in 1973, presently consists of nine steel producing companies with 1985 production of 13.2 million tons. In 1985, Siderbras ranked as the world's fifth largest steel producer. With anticipated production of 14.2 million tons in 1986, Siderbras will move to third place among the world's steel producers.

The steel mills using coke-based blast furnaces within the Siderbras System are:

- Companhia Siderurgica Nacional (CSN)
CSN began operations in 1946. It presently has an installed raw steel capacity of 4.6 million tons.
- USIMINAS
USIMINAS started production in 1962. It presently has an installed capacity of 3.5 million tons.
- Companhia Siderurgica Paulista (COSIPA)
COSIPA started production in 1965. Its present installed

capacity is 2.8 million tons. After completion of its Phase 3 expansion, capacity will be increased to 4.0 million tons.

- Companhia Siderurgica de Tubarao (CST)
CST started production in 1983 in a plant with one blast furnace. Its present capacity is 3.0 million tons. All of CST's production is semi-finished steel.

- ACOMINAS
ACOMINAS is presently beginning operations with an installed capacity of 2.0 million tons.

Over the next few years, Siderbras capacity will be increased to a total of 18.2 million tons of raw steel production.

3. Coking Coal Demand of the Siderbras System

From 1972 to 1985, Siderbras coking coal consumption rose steadily from 2.6 to 9.2 million tons on dry basis. Imports account for the bulk of consumption. In 1985, for example, Brazil imported 8.8 million tons, or about 87 percent of overall coking coal consumption.

The projected pig iron output from coke-based works in the next 2-3 years is 16.0 million tons. This output level should require about 12.9 million tons of coking coal. Since Brazil is likely to rely on local coal for at least 15.0 percent of her needs; imports are projected to reach about 11.0 million tons in this period.

4. Competitive Aspects of U.S. Coking Coal

U.S. coking coal has been traditionally recognized for its high grade and good quality for metallurgical uses. Despite its good quality, U.S. coking coal has been losing its international competitive edge. This is the result of heavy labor costs, high inland freight rates and inadequate infrastructure, particularly with respect to the lack of deepwater channels at coal export piers. Moreover, the worldwide steel industry has adopted new technologies which emphasize the use of lower grade coal, thus further decreasing the advantage of U.S. coking coal. As a consequence, such newcomers to the international coking coal market as Australia, Canada, Poland, China, Russia, South Africa and Columbia have come to displace the United States as the dominant player in this market.

Regarding labor costs, it should be noted that the proportion of direct and indirect wages in total costs is significantly higher in the United States coal industry than in its international rivals. Contrary to what has become the norm in recent wage settlements, coal workers have been unwilling or unable to make any wage concessions in their latest negotiations.

From 1982 to 1986, inland freight as a proportion of FOB on price rose from 23 to 33 percent. This came about because freight rates remained inflexible while prices declined

in a softening coal market. Relatively high railroad freight rates have been debated over a long period of time without a favorable response from the railways. The U.S. railroads must realize that they have to contribute their responsible share to make U.S. coal more competitive.

U.S. coal piers are equipped to handle large vessels and to load them efficiently. The channels of access to these piers, however, have a limitation in depth which restricts vessel size. Accordingly, U.S. coal piers normally handle vessels of the so-called Panamax size which can carry 60,000 to 80,000 tons of coal, but are inadequate to load fully the larger Cape size vessels, i.e., those in the range of 120,000 to 200,000 tons of coal. By contrast, most U.S. competitors have coal export infrastructure which allows loading of Cape size vessels.

These kinds of vessels enable buyers, like Brazil, to benefit from significantly lower ocean freight rates compared to Panamax loading. Brazil which has coal unloading facilities adequate for Cape size class vessels has an incentive to shift to larger coal vessels. A further incentive is provided by the fact that a substantial portion of Brazil's iron ore exports are shipped in Cape size vessels. There is, therefore, a large pool of Cape size vessels available on the Brazilian ore/coal routes to meet Brazil's requirements more competitively.

5. Prospects for Brazilian Imports of U.S. Coal

Brazil is presently the third largest market for U.S. coking coal, after the EEC and Japan, and the only major market which has experienced substantial sustained growth. Between 1981 and 1985, imports of U.S. coking coal by Siderbras increased from 2.7 million net tons to 5.8 million net tons, or 116 percent. In contrast, Japan and the EEC reduced imports of U.S. coking coal by 37 and 12 percent respectively. As illustrated below, but for Brazil's increased purchases of U.S. coal, the decline in U.S. exports would have been substantially greater in the period 1981-85:

U.S. Exports of Metallurgical Coal: 1981-85 (000 net tons)

	Japan	Europe		Other	Brazil	Total	Total Less Brazil
		EEC	Other				
1981	21,902	22,841	6,216	5,753	2,712	59,424	56,712
1982	22,364	21,418	7,316	5,476	3,110	59,684	56,574
1983	16,122	13,419	4,700	5,180	3,572	42,993	39,421
1984	15,499	19,340	4,420	5,321	4,692	49,272	44,580
1985	13,903	20,193	6,411	6,951	5,846	53,304	47,458
Percent Change	-36.5	-11.6	+ 3.1	+20.8	+115.6	-10.3	-16.3

Brazil's purchases of U.S. coking coal between 1981 and 1985 increased from 4.6 percent to 11.00 percent of U.S. coal exports, rising from 160 million dollars in 1979 to 300 million dollars in 1985. According to the U.S. coal industry, Brazilian imports of U.S coking coal account for over 6,000 coal related jobs in the U.S.

The U.S. coal industry has been a prime beneficiary of the expansion of Brazilian steel capacity and of Brazil's ability to export steel products world wide. In 1985, every 100 tons of steel exported world wide by Siderbras in effect constituted an export of 38 tons of U.S. coal. This means that for every ton of steel which is exported from Brazil, the U.S. coal industry receives 20 dollars in revenues, or over 100 million dollars in the coal content of Siderbras 1985 exports of approximately 5 million tons. In terms of total production, we believe the ratio of U.S. coal purchased per ton of steel produced is higher within Siderbras than for any other foreign steelmaker purchasing U.S. coal.

The prospects for U.S. coal maintaining its position in the Brazilian market and realizing the benefits of continued expansion of Siderbras production are affected by two factors. First, the extent to which U.S. coal remains a competitive source. Second, the extent to which pressures from steel importing countries requires Siderbras to purchase coal from other sources.

As previously discussed, high labor costs, the lack of deepwater channels at U.S. ports, and high inland freight rates are threatening the competitiveness of U.S. coal. Today, the use of large vessels in round trips with Brazil's iron ore permits Siderbras to purchase coal from other sources at lower delivered costs than American coal. If U.S. inland freight

costs remain at their present high levels, it will be increasingly difficult for U.S. coal to remain competitive. Furthermore, because of inadequate deepwater channels at U.S. ports, ocean freight costs per ton from the U.S. are at a significant disadvantage, a disadvantage which cannot be recouped because of high U.S. labor costs.

The decline in the competitiveness of the U.S. coal industry is coincident with the decline in Siderbras exports to the United States. Despite the growing volume of Brazilian imports of U.S. coal, in 1985 the U.S. Government imposed restraints on Brazilian steel exports to the United States at a level of approximately 1.5 million net tons, including 700,000 net tons of semi-finished steel. The export restraints reduced the value of Brazilian finished steel exports to the U.S. by approximate \$150 million dollars, only partially compensated for by exports of semi-finished steel. As a consequence of the export restraints on steel shipments to the U.S., Siderbras has had to shift its exports to other markets. Coincidentally, some of these new markets also are international coal suppliers. For example, China is the principal buyer of Brazilian steel and pig iron. In order to offset its hard currency outlay for Brazilian steel and pig iron it is seeking to sell coal to Brazil. Similar pressures are arising from other sources. Brazil is in the process of concluding its first coal purchase from the Soviet Union. As Siderbras

continues to diversify its steel exports, it expects substantial pressures from its customers to increase its sourcing of coal from the countries in which its markets are expanding. Inevitably, increased purchases from one source will result in a decreasing share from another source, possibly the United States.

The combination of declining U.S. price competitiveness and pressures from customers in expanding markets for Brazil's steel, should be cause for concern to the U.S. coal industry. As Brazil's steel capacity continues to expand and its consumption of imported coal increases, these factors may in fact lead to a deterioration in the position of U.S. coking coal in the Brazilian market. The lower prices generally available in non-U.S. steel export markets combined with the decline in the return on U.S. sales of steel resulting from lower average per ton prices (attributable to increased semifinished steel and decreased finished steel exports) puts a premium on the price competitiveness of imported coal. Pressures from customers which are increasing steel purchases to offset the costs of those purchases by Siderbras' sourcing coal in their markets, are likely to grow. It is, therefore, unlikely that U.S. coal exports to Brazil can maintain their present position and realize the benefits of expanding Brazilian steel production unless U.S. coal becomes more price competitive or the pressures from third country markets for

Brazil to purchase coal can be diffused by adjustments in Brazilian steel exports to the U.S.

While the U.S. remains the principal or largest offshore source for coking coal for Brazil, its position is by no means assured. Siderbras will, of course, continue to purchase substantial quantities in the U.S. as long as it makes economic sense. However, the prospect of U.S. coal maintaining its position in the Brazilian market and benefitting from the growth in Brazilian steel production will largely be affected by factors beyond Siderbras' control.



MISSISSIPPI VALLEY COAL EXPORTERS COUNCIL

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Phone: (504)
566-1001

July 31, 1986

Honorable John W. Warner
Chairman, Subcommittee on Natural
Resources Development and Production
United States Senate
Washington, D.C. 20510

Dear Mr. Warner:

Thank you for your invitation to attend the oversight hearing on prospects for exporting American coal being held by the Subcommittee on Natural Resources Development and Production of the Committee on Energy and Natural Resources.

Unfortunately, due to prior commitments, I will be unable to attend. Please consider the enclosed document as my testimony.

Regards,


R.J. Clements
President

RJC/kmv

Enclosure

Statement of
Richard J. Clements
President
Mississippi Valley Coal Exporters Council

Presented to the
Subcommittee on
Natural Resources Development and Production

Our statement is brief because we submit that if this Subcommittee wants to help improve the outlook for U.S. coal exports, all it must do is change the attitude of the Federal Government.

Our Government's demonstrated trade policy has led this nation into an ever increasing trade deficit that will approach \$170 billion this year.

The pressing need to eliminate this deficit must be recognized, and a plan developed to do so. The formation and execution of such a plan should be given the same national priority as maintaining a strong defense.

Until the importance of a balanced trade posture is recognized and action taken to elevate trade to its proper level of concern, I don't believe we can expect much support from the Government in regards to coal exports. It has been made clear on a number of occasions that coal exports are viewed as a minor player in what we see as a minor trade effort.

This is not to say there has not been Government activity. Not even the Great Oz could have produced such a lineup and orchestrated as visually convincing a performance.

We had the Interagency Working Group, the US-Japan Working Group on Energy, the Reagan-Nakasone Agreement, and now the Federal Coal Export Commission, just to name a few. There has been tinkling of bells, a sounding of symbols, an occasional clap of thunder, a lot of smoke, and little else.

Undoubtedly, today you will hear Government representatives tell you all of the good things they have done and will be doing to promote the export of coal. Of course you won't believe them. Why should you? Nothing has happened in the past several weeks to change either their attitude or their approach. Maybe you can motivate them.

In good faith, and perhaps in spite of, we in the Mississippi Valley Coal Exporters Council have worked with and supported the various entities within the Federal Government that claim to be the shepherds of coal exports. We will continue to do so in the hope that something good will eventually emerge.

In the meantime, we will continue to promote U.S. coal exports with our private sector diplomacy.

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